Arbor, Michigan.

U. S. DEPARTMENT OF LABOR
JAMES J. DAVIS, Secretary
BUREAU OF LABOR STATISTICS
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after the completion of the day's work, thus, including travel time in the mine, work time, and lunch time.

The time (hours) at the face for the tonnage-rate workers, mean

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Wages and Hours of Labor in Anthracite Coal Mining in Pennsylvania in January, 1922.

THE earnings and hours of anthracite coal mine employees here presented were compiled from wage data obtained from the records of 29 representative anthracite collieries for the half-month pay-roll period ending January 31, 1922. The data were copied from the records by agents of the Bureau of Labor Statistics. A total of 21,999 employees were covered by this inquiry.

"Contract miners" is the basic occupation of anthracite coal mining. The employees in this occupation are paid a tonnage or other piece rate, the unit of quantity being a ton (2,240 pounds), a mine car of specified capacity, or a yard. Contract miners may have one or more helpers, known as contract miners' laborers. The wages of these laborers are paid principally from the gross earnings of the contract miners. The larger share of the joint earnings, however, goes to the contract miner.

The contract miner may increase his net earnings if he can provide work for more than one laborer. For instance, the records for one of the companies showed a contract miner as having worked 63½ hours and as having net earnings of $274.65 during the half-month pay-roll period covered. As the earnings were unusually large the company was asked for an explanation. The company stated that the hours and earnings of this employee were correct, but that he had two laborers. On the other hand many contract miners do not employ laborers, as in the 29 collieries there were 6,209 contract miners and 3,383 contract miners' laborers.

As all contract miners and the great majority of the contract miners' laborers are tonnage or piece workers and as the hours worked by them are not recorded on the pay rolls except in a few collieries it was necessary for the Bureau of Labor Statistics, through its agents, first to arrange with the mining companies to keep a day-by-day record of hours for each tonnage worker for the sample pay-roll period. After the day-by-day record of time (hours) had been kept for the selected pay-roll period, agents again visited the companies and made a copy of the time (hours) and earnings of all employees, time workers as well as tonnage workers, for the selected pay-roll period, and also obtained other information concerning hours, earnings, and working conditions, including the average time of travel from the entrance of the mine to the face and return, and such time as may have been taken for lunch. The time (hours) in the mine per day herein shown means the actual hours in the mine from the time (hour and minute) of entrance into the shaft or other opening of the mine in the morning to the time (hour and minute) of exit from the shaft or other opening of the mine in the afternoon

paid a regular daily rate; the consideration miner is a man usually

after the completion of the day's work, thus, including travel time in the mine, work time, and lunch time.

The time (hours) at the face for the tonnage-rate workers means the actual hours at the face or place of work from time (hour and minute) of arrival at the face or place of work in the morning to time (hour and minute) of leaving the face or place of work in the afternoon on the completion of the day's work. This face time includes any time that may be taken for lunch, as the majority of the tonnage workers do not have a regular lunch period and take as much or little time therefor as they desire. The difference between the time (hours) in the mine and the time (hours) at the face, therefore, is the average time (minutes) of travel from the shaft or other opening at the entrance into the mine to the face or place of work and return.

An effort was made to obtain the tonnage rates of contract miners and such figures were obtained in part. It was found that tonnage rates differed within a mine and as between the several mines because of difference in the thickness of the coal seam or for other reasons. For one mine there was a rate as low as 32 cents per ton and in the same mine there was a rate as high as 69 cents per ton. In one mine there was a rate of $1.58 per ton. The rates obtained at other mines fell within these limits.

Attempt was also made to get the wage rate of the contract miners' laborer and figures were obtained at several of the mines. The rates of this occupation, likewise, may differ within the mine and as between different mines. The contract miners' laborer is paid a wage rate per shift, the term "shift" meaning what is accepted as a day's work, which may differ as to actual hours of labor. A shift usually means the loading of a certain number of mine cars, which number may vary in a mine; thus, the rate of the contract miners' laborer partakes to some extent of the nature of a car rate or in effect a tonnage rate, as distinct from a strictly time rate.

The peak of wages of anthracite mine employees by the award of the Anthracite Coal Commission began with April 1, 1920, and continued under the award until March 31, 1922. During this period no bonus was paid in addition to regular wage rates.

Overtime or time worked in excess of the basic or regular hours of the colliery or the occupation was paid for at the regular rate.

Deductions for powder, fuses, caps, or squibbs used in blasting coal from the seams were made from earnings of tonnage employees of all colliers, and for blacksmithing of 24 of the 29 collieries. The earnings herein shown are net.

Table 1 shows the daily rate for consideration miners and company miners and their laborers; the days and hours of operation for the half-month pay-roll period covered; the tons produced per capita in the same pay-roll period for contract miners, consideration miners, and company miners, and their laborers as a combined group, and, separately, their average earnings per hour. There is also shown in the table the number of days of operation and the number of days closed for the mines covered during the 12 months ending October 31, 1921.

It will be observed that some mines do not have consideration miners and others do not have company miners. Some of the mines, however, have both of these occupations. The company miner is

The summary below shows the number of collieries covered in this inquiry; the number of contract miners, contract miners' laborers

paid a regular daily rate; the consideration miner is a man usually employed as a contract miner, but who for a time is receiving a guaranteed minimum rate because of the fact that a tonnage rate would not produce earnings per day equal to the guaranteed rate. The pay rolls show that a few contract miners during a small part of the pay-roll period were on a consideration or day basis, but it was not practicable to segregate the data relating to them, and such employees have been considered as contract miners during the entire period so far as time and earnings are concerned; likewise a few of the consideration miners were on a contract basis during a minor part of the pay-roll period covered, thereby causing their average earnings to be higher than they would have been had they worked exclusively as consideration miners.

The daily rate for consideration and company miners and their laborers is for a day of eight hours of actual work, not including a lunch period. In the part of the table relating to earnings per hour are given the average earnings of consideration and company miners and their laborers. In these figures the time at the face includes the hours worked and the time taken for lunch, so as to put them on a comparable basis with the contract miners.

Prior to the 1920 award of the United States Anthracite Coal Commission many pumpmen were working a 12-hour day at a rate per day based on 12 hours. By that award the basic day or shift was changed to eight hours and provision was made for the adjustment of rates on an 8-hour day or shift. This resulted in a material increase in average rates and earnings per hour.

The word "start" as used in the table means a day on which the employee worked, regardless of whether he worked the whole day or only a part thereof.

Table 2 is divided into two parts. The first section relates to contract miners and their laborers who are paid at tonnage or other piece rates, and the second to all of the other employees who are paid at time rates. Part A shows for contract miners and contract miners' laborers the number of collieries and employees covered; the average number of starts (days on which employee worked) made in the half month covered; the average hours in the half month (1) based on time at the face (including time for lunch), and (2) based on time in the mine, which embraces the time at the face (including time for lunch) and the time of travel from the shaft or other opening at the entrance of the mine to the face and return; the average hours per start likewise shown in two ways; the average earnings in the half month; the average earnings per start; and the average earnings per hour based on time at the face and based on time in the mine.

Part B of Table 2 shows for each of the time-work occupations the number of collieries and employees covered; the average number of starts (days on which employees worked) made in the half month; the average hours worked in the half month; the average hours worked per start; and the average earnings in the half month, per start, and per hour. The hours and earnings of employees shown in this section of the table represent time at the face or other place of work, excluding time for lunch.

The summary below shows the number of collieries covered in this inquiry; the number of contract miners, contract miners' laborers, consideration miners, consideration miners' laborers, company miners, and company miners' laborers combined in one group; the average number of starts made during the half month ending January 31, 1922; the average, the highest, and the lowest number of days of operation during the 12 months ending October 31, 1921, for the collieries covered; and an estimate of the amount that would have been earned in the year had all employees of these occupations worked every day of operation during the stated year at the average earnings for the half month covered in this study.

Summary for contract miners, contract miners' laborers, consideration miners, consideration miners' laborers, company miners, and company miners' laborers, combined in one group, in representative anthracite collieries in Pennsylvania.

Number of collieries covered	29
Number of contract miners, consideration miners and company miners and their laborers, in collieries covered	12,106
Average per capita number of starts (days) in half month covered	11.0
Number of days of operation during 12 months ending Oct. 31, 1921, for collieries covered:	
Average number of days [1]	287.7
Highest number of days in any colliery covered	308
Lowest number of days in any colliery covered	199
Estimated average earnings during year, assuming each person to have worked every day of operation and to have earned as much per start as during the pay period taken	$1,892.38

[1] The average time for all anthracite mines in Pennsylvania in 1920 was 271 days, as reported to the United States Geological Survey. Figures for 1921 are not yet available.

TABLE 1.—DAILY RATES FOR CONSIDERATION AND COMPANY MINERS AND THEIR LABORERS; DAYS AND HOURS OF OPERATION; TONS PRODUCED PER CAPITA, AND AVERAGE EARNINGS PER HOUR FOR MINERS AND THEIR LABORERS, IN SECOND HALF OF JANUARY, 1922; ALSO DAYS OF OPERATION AND DAYS CLOSED IN 12 MONTHS ENDING OCTOBER 31, 1921, FOR REPRESENTATIVE ANTHRACITE COLLIERIES IN PENNSYLVANIA.

Total. 91 78 69 67 73 72

TABLE 1.—DAILY RATES FOR CONSIDERATION AND COMPANY MINERS AND THEIR LABORERS; DAYS AND HOURS OF OPERATION; TONS PRODUCED PER CAPITA, AND AVERAGE EARNINGS PER HOUR FOR MINERS AND THEIR LABORERS, IN SECOND HALF OF JANUARY, 1922; ALSO DAYS OF OPERATION AND DAYS CLOSED IN 12 MONTHS ENDING OCTOBER 31, 1921, FOR REPRESENTATIVE ANTHRACITE COLLIERIES IN PENNSYLVANIA.

Number of colliery.	Rate per day of 8 hours for—				Number of days (tipple time) of operation in half month.	Number of hours of operation in half month.	Average tons per man produced by contract miners, consideration miners, company miners, and their laborers, all combined.				Number of days of operation during year ending Oct. 31, 1921.	Number of days closed during year ending Oct. 31, 1921, on account of—						
	Consideration miners.	Consideration miners' laborers.	Company miners.	Company miners' laborers.			In half month.	Per start or day.	Per hour— Time at face.	Per hour— Time in colliery.		Transportation disability.	Labor shortage.	Strikes.	Mine disability.	No market.	Sundays, holidays, and other causes.	Total.
1	{ $6.14 / 6.44	$5.66 / 5.94	$5.62	$5.07	14	112	40.3	3.6	0.45	0.41	291			4	1		69	74
2	6.14	5.19	5.40	4.96	14	113	63.5	4.9	.63	.60	260			28	5	3	69	105
3			5.59	5.15	12	96	27.7	2.6	.37	.35	300				1		64	65
4			5.59	5.15	14	112	31.7	2.9	.45	.42	300			1			64	65
5	6.14	4.78	5.59	{ 4.78 / 5.23	13	104	49.9	4.5	.63	.59	298						67	67
6	6.14	4.94	5.59	5.15	13	104	47.5	4.3	.57	.55	296				1		68	69
7	5.26	4.73	5.26	4.67	14	117	28.7	2.2	.28	.26	308						57	57
8			6.43	5.61	14	95½	41.0	3.1	.43	.41	199	3			4	100	59	166
9			6.08	5.17	14	101½	41.7	3.3	.42	.39	298					6	61	67
10	6.14	5.18			14	97⅓	48.8	3.7	.53	.49	288					14	63	77
11			6.19	5.16	14	87⅔	42.6	3 4	.46	.43	291					11	63	74
12			5.14	4.79	11	66	21.0	2.0	.24	.23	300			6			59	65
13			5.94	4.92	10	75	26.7	2.6	.36	.34	253				27	20	65	112
14			{ 5.41 / 5.70	5.23 / 4.99	10	80	31.2	3.3	.46	.43	295						70	70
15			5.42	4.96	12	96	28.4	3.0	.41	.39	290					8	67	75
16			5.42	4.95	13	104	35.0	3.0	.39	.35	290				3		72	75
17			5.42	4.95	13	104	33.8	3.2	.46	.40	291			4			70	74
18	5.26	4.69			14	96	31.6	2.6	.35	.33	293		3		6		63	72
19			5.42	4.95	13	104	43.0	3.9	.58	.57	296						69	69
20			5.29	4.68	7	49	13.4	1.6	.20	.18	273				1	27	64	92
21	5.30		5.26	4.82	8	64	39.3	5.1	.91	.77	277			1		20	67	88
22	6.28	5.85			14	107	36.9	3.9	.57	.49	298						67	67
23	6.14	{ 5.66 / 5.94	5.62	5.07	14	112	36.5	3.3	.41	.38	279			14	1		71	86

TABLE 1.—DAILY RATES FOR CONSIDERATION AND COMPANY MINERS AND THEIR LABORERS; DAYS AND HOURS OF OPERATION; TONS PRODUCED PER CAPITA, AND AVERAGE EARNINGS PER HOUR FOR MINERS AND THEIR LABORERS, IN SECOND HALF OF JANUARY, 1922; ALSO DAYS OF OPERATION AND DAYS CLOSED IN 12 MONTHS ENDING OCTOBER 31, 1921, FOR REPRESENTATIVE ANTHRACITE COLLIERIES IN PENNSYLVANIA—Concluded.

Number of colliery.	Rate per day of 8 hours for—				Number of days (tipple time) of operation in half month.	Number of hours of operation in half month.	Average tons per man produced by contract miners, consideration miners, company miners, and their laborers all combined.				Number of days of operation during year ending Oct. 31, 1921.	Number of days closed during year ending Oct. 31, 1921, on account of—						
	Consideration miners.	Consideration miners' laborers.	Company miners.	Company miners' laborers.			In half month.	Per start or day.	Per hour—			Transportation disability.	Labor shortage.	Strikes.	Mine disability.	No market.	Sundays, holidays, and other causes.	Total.
									Time at face.	Time in colliery.								
24	$6.14	$5.19	$5.40	$4.96	14	113	60.6	4.7	0.61	0.58	274	.....	.....	22	.....	2	67	91
25	6.32	5.22	.....	.....	14	112	39.9	3.3	.39	.36	287	.....	.....	.....	.....	10	68	78
26	.....	.....	4.42 5.42	4.20 4.85	11	75	39.3	3.7	.55	.48	296	.....	.....	.....	.....	.....	69	69
27	.....	.....	5.33	4.88	11	88	39.4	4.0	.58	.48	298	.....	.....	.....	.....	.....	67	67
28	.....	.....	5.61	5.22	11	86½	34.3	3.3	.54	.46	292	.....	.....	.....	3	.....	70	73
29	.....	.....	4.41 5.30 5.50	4.20 4.61	11	84½	48.9	5.2	.73	.64	293	.....	.....	6	.....	.....	66	72

TABLE 2.—NUMBER OF COLLIERIES AND EMPLOYEES, AVERAGE NUMBER OF STARTS (DAYS), AND AVERAGE HOURS AND EARNINGS, IN REPRESENTATIVE ANTHRACITE COLLIERIES IN PENNSYLVANIA, BY OCCUPATION, IN SECOND HALF OF JANUARY, 1922.

Number of colliery.	Average earnings per hour of—												WAGE
	Contract miners.	Contract miners' laborers.	Consideration miners.	Consideration miners' laborers.	Company miners.	Company miners' laborers.							

Average earnings per hour of—

Number of colliery.	Contract miners.		Contract miners' laborers.		Consideration miners.		Consideration miners' laborers.		Company miners.		Company miners' laborers.	
	Time at face, including lunch.	Time in colliery.	Time at face, including lunch.	Time in colliery.	Time at face, including lunch.	Time in colliery.	Time at face, including lunch.	Time in colliery.	Time at face, including lunch.	Time in colliery.	Time at face, including lunch.	Time in colliery.
1	$0.880	$0.812	$0.654	$0.603	$0.730	$0.677	$0.676	$0.627	$0.676	$0.628	$0.601	$0.558
2	1.646	1.568	.649	.628	.941	.903	.616	.593	.646	.622	.589	.568
3	1.195	1.113	.816	.762	.....	.....	.....	.....	.639	.624	.609	.577
4	1.367	1.266	.953	.884	.....	.....	.....	.....	.654	.618	.609	.575
5	1.059	.986	.686	.641	.744	.702	.562	.531	.676	.641	.608	.576
6	1.075	1.005	.805	.752	.722	.681	.585	.552	.674	.637	.613	.580
7	.860	.818	.702	.661	.635	.601	.541	.512	.608	.579	.539	.514
8	1.192	1.137	.965	.921	.....	.....	.....	.....	.745	.720	.650	.628
9	1.050	.983	.914	.855	.....	.....	.....	.....	.722	.687	.611	.579
10	1.072	.976	.773	.709	.719	.667	.610	.566	.....	.....	.....	.....
11	1.020	.951	.766	.717	.....	.....	.....	.....	.736	.701	.611	.580
12	.978	.923	.805	.739	.....	.....	.....	.....	.588	.596	.547	.517
13	1.090	1.017	.864	.806	.....	.....	.....	.....	.699	.660	.579	.548
14	1.207	1.124	.787	.733	.....	.....	.....	.....	.719	.679	.633	.598
15	.961	.898	.725	.679	.....	.....	.....	.....	.644	.609	.593	.561
16	1.013	.895	.731	.642	.....	.....	.....	.....	.638	.571	.582	.521
17	1.056	.917	.758	.659	.....	.....	.....	.....	.638	.570	.583	.521
18	1.023	.977	.610	.583	.615	.589	.548	.525	.....	.....	.....	.....
19	1.268	1.005	.781	.677	.....	.....	.....	.....	.640	.576	.582	.521
20	.706	.629	.636	.566	.....	.....	.....	.....	.644	.576	.549	.491
21	1.752	1.449	.723	.633	.613	.548	.....	.....	.643	.574	.589	.527
22	.962	.818	.900	.766	.763	.669	.679	.599	.....	.....	.....	.....
23	.890	.818	.769	.708	.732	.679	.683	.633	.675	.627	.600	.557
24	1.303	1.240	.651	.626	.944	.906	.616	.593	.646	.622	.589	.567
25	.850	.771	.572	.520	.722	.639	.598	.546	.....	.....	.....	.....
26	1.162	1.004	.818	.706	.....	.....	.....	.....	.627	.560	.547	.487
27	1.304	1.053	.965	.701	.....	.....	.....	.....	.628	.584	.574	.489
28	1.008	.860	.756	.657	.....	.....	.....	.....	.662	.595	.616	.534
29	1.069	.923	.682	.603	.....	.....	.....	.....	.655	.560	.530	.475

Shipping Strike in Hongkong. [1]

TABLE 2.—NUMBER OF COLLIERIES AND EMPLOYEES, AVERAGE NUMBER OF STARTS (DAYS), AND AVERAGE HOURS AND EARNINGS, IN REPRESENTATIVE ANTHRACITE COLLIERIES IN PENNSYLVANIA, BY OCCUPATION, IN SECOND HALF OF JANUARY, 1922.

(*A*) *Tonnage workers and their laborers.*

Occupation.	Number of collieries.	Number of employees.	Average number of starts (days) made in half month.	Average hours worked in half month.		Average hours per start based on—		Average earnings.			
				Time at face, including lunch.	Total time in mine.	Time at face, including lunch.	Total time in mine.	In half month.	Per start (day).	Per hour based on time at face, including lunch.	Per hour based on total time in mine.
Inside work:											
Contract miners..	29	6,209	11.5	79.6	87.4	6.9	7.6	$86.60	$7.53	$1.088	$0.991
Contract miners' laborers.....	29	3,383	9.8	70.0	76.2	7.2	7.8	54.15	5.55	.773	.711

(*B*) *Time workers.*

Occupation.	Number of collieries.	Number of employees.	Average number of starts (days) made in half month.	Average hours.		Average earnings.		
				Worked in half month.	Per start (day).	In half month.	Per start (day).	Per hour.
Inside work:								
Blacksmiths.....	12	23	12.7	115.5	9.1	$79.08	$6.21	$0.685
Bratticemen.....	21	136	12.0	100.6	8.4	66.06	5.53	.657
Cagers.....	28	196	12.2	119.3	9.8	72.04	5.90	.604
Car runners.....	22	402	12.2	105.4	8.7	62.35	5.12	.592
Door tenders (boys).....	26	190	11.7	95.2	8.2	32.56	2.79	.342
Drivers.....	27	539	11.6	95.5	8.2	55.39	4.78	.580
Engineers.....	24	152	13.9	117.7	8.5	76.14	5.49	.647
Laborers.....	29	1,426	11.8	99.3	8.4	60.39	5.10	.608
Laborers, company miners'.....	25	774	11.2	91.7	8.2	57.66	5.15	.629
Laborers, consideration miners'.....	11	339	11.4	90.0	7.9	58.87	5.16	.654
Machinists.....	15	31	14.0	120.9	8.6	82.03	5.85	.678
Masons.....	16	51	12.9	105.8	8.2	71.65	5.54	.677
Miners, company.....	25	725	11.1	90.6	8.2	63.17	5.71	.697
Miners, consideration.....	12	626	12.9	98.5	7.7	87.04	6.76	.883
Motormen.....	27	327	12.8	120.9	9.5	78.37	6.14	.648
Motor brakemen.....	27	310	12.1	110.6	9.1	64.64	5.33	.585
Pumpmen.....	26	180	15.9	129.6	8.2	81.29	5.12	.627
Timbermen.....	20	161	10.9	89.1	8.2	60.31	5.52	.677
Trackmen.....	27	177	13.0	110.1	8.5	74.29	5.71	.675
Other employees.....	29	713	13.0	116.7	9.0	69.60	5.37	.596
Outside work:								
Ashmen.....	25	67	15.4	135.7	8.8	71.25	4.63	.525
Blacksmiths.....	29	64	13.5	120.5	8.9	80.38	5.96	.667
Cagers.....	26	100	12.8	120.3	9.4	64.48	5.05	.536
Carpenters.....	26	221	12.8	113.9	8.9	75.29	5.88	.661
Car runners.....	22	87	12.3	106.5	8.6	56.36	4.57	.529
Dumpers.....	26	85	12.2	111.0	9.1	58.82	4.82	.530
Engineers.....	29	203	15.0	129.1	8.6	83.39	5.58	.646
Firemen.....	29	249	15.7	127.8	8.1	76.05	4.84	.595
Jig runners.....	23	109	13.2	124.1	9.4	62.96	4.77	.507
Laborers.....	29	1,349	12.1	105.9	8.8	55.77	4.62	.527
Loaders.....	27	187	12.9	113.8	8.8	60.37	4.69	.531
Machinists.....	27	89	13.7	127.1	9.3	83.20	6.09	.655
Oilers.....	28	69	13.2	122.9	9.3	64.58	4.90	.535
Platemen.....	25	181	12.5	106.0	8.5	56.15	4.49	.530
Repairmen.....	14	94	13.7	116.7	8.5	68.26	4.98	.585
Slaters (boys).....	26	410	12.2	98.7	8.1	32.91	2.69	.333
Timber cutters.....	28	141	12.3	106.3	8.7	57.10	4.66	.537
Trackmen.....	22	60	12.1	98.6	8.2	54.13	4.49	.549
Other employees.....	29	1,074	13.5	127.7	9.5	67.30	5.00	.527

deprivation of their rights, rough treatment, 14 hours' work a day, and an existence bordering on semistarvation. The majority of these men have families averaging three or four persons, and the

Shipping Strike in Hongkong. [1]

By TA CHEN, A. M.

Causes of the Strike.

HONGKONG, a British Crown Colony, is an island of about 11 miles in length and 29 miles in circumference. It lies at the mouth of the Pearl River, and is situated 40 miles east of Macao by water and 90 miles south of Canton by water and 110 miles by the Canton-Kowloon Railway. Since 1844, when China ceded this island to England, Hongkong's shipping industry has been developing steadily, and to-day it is the leading shipping port of the Orient. In recent years commodity prices in this colony have advanced faster than in any of the other commercial cities in China. For instance, the cost of polished rice in Shanghai has increased 125 per cent since 1914, but in Hongkong it has increased 155 per cent. Being an industrial center, in order to meet the daily needs of its 528,090 inhabitants, the colony imports necessaries from other towns; these include fowls from Wuchow, Kwangsi, beef and pork from Canton, fruits and fish from Swatow, and textiles and clothing material from Shanghai. Freight charges and customs duties on these goods make the cost of living relatively higher in Hongkong, which has worked hardship on its laboring classes.

Repeated triumphs of labor in recent strikes have given Hongkong's seamen courage and confidence in their present struggle for a fair compensation for their toil. During the year 1921 a successful strike occurred in almost every important industry in Canton. The printers' strike of last December left the whole city without newspapers for three days and compelled the publishers and newspaper companies to grant their employees a 40 per cent increase over the prevailing wages. About 60,000 workers in some 100 trades in Hongkong are unionized, some following the rules of craft guilds while others have adopted those of labor unions. Fully 30,000 of them are natives of Canton, who have been in constant touch with labor conditions in their home community and who are prime movers in the present strike.

Ever since the Hongkong strike of April, 1920,[2] which involved 9,000 workers, local laborers have been dissatisfied with capitalists. This class feeling was greatly intensified when toward the end of last year foreign seamen in the colony, who already had a comparatively higher scale of wages, were granted a further increase of about 15 per cent, whereas most of the Chinese were still paid at pre-war rates. Because of this discrimination the Chinese seamen had a general grievance against the shipowners. In a recent interview the president of the Chinese Seamen's Union summarized the situation accurately when he said: "The Chinese have taken a stand against

[1] In the preparation of this paper the following sources published in Hongkong, Canton, and Shanghai have been consulted: The Shun Pao, Labor News, Kuo Wen News Exchange, The Industrial Monthly, South China Morning Post, North China Herald, The China Press, The Eastern Times, and the Canton Times.

For other articles relative to labor conditions in China see MONTHLY LABOR REVIEW, August, 1921, pp. 17-21, and December, 1921, pp. 5-7.

[2] See MONTHLY LABOR REVIEW, December 1920, p. 207.

Coastwise, river, Nanyang lines:

deprivation of their rights, rough treatment, 14 hours' work a day, and an existence bordering on semistarvation. The majority of these men have families averaging three or four persons, and they find it impossible to live on $20 a month, and are therefore determined to obtain a minimum of $29.50 a month."

Extent of the Strike.

SINCE the shipping companies had twice refused to consider the seamen's demands for a wage increase, the Chinese Seamen's Union presented its third petition on January 12 and demanded a reply within 24 hours. Failing again to receive a satisfactory answer, 1,500 deck hands and stokers "downed tools" on the morning of January 13. A week later the number of strikers reached 6,500, and shortly after the Chinese New Year (Jan. 27), it grew to about 30,000, including pilots, tallymen, lightermen, carriers, stevedores, wharf coolies, cargo laborers, and coal coolies, in addition to the deck hands and stokers already mentioned. When on February 1 the British Governor of Hongkong proclaimed the Chinese Seamen's Union an unlawful society, a general sympathetic strike was declared, which increased the strikers to about 50,000, and included cooks, domestics, bakers, pastry men, office boys, delivery men, dairymen, tramway employees, ricksha and chair coolies, bank clerks, compositors, newspaper employees, printers, cable company employees, and employees of shipbuilding and repairing yards.

Up to the middle of February, 166 steamers carrying 280,404 tons of shipping were held up in the port of Hongkong:

	Number of ships.	Tonnage.
English	82	158,368
Chinese	36	30,166
Japanese	15	36,474
Dutch	11	27,417
American	8	[3] 14,529
Norwegian	7	6,798
French	4	3,053
Danish	1	1,456
Portuguese	1	1,145
Siamese	1	998
Total	166	280,404

This tie-up of cargo caused direct losses of about $5,000,000 to shipping companies, distributed among the following lines:

Pacific lines:
1. China Mail Steamship Co.
2. Pacific Mail Steamship Co.
3. The Admiral Line.
4. Tokyo Kisen Kaisha.
5. The Dollar Line.

Coastwise, river, and Nanyang lines:
1. Butterfield & Swire.
2. Mackenzie & Mackinnon.
3. China Merchants Steam Navigation Co.
4. Osaka Kisen Kaisha.

[3] This figure does not represent the total loss of American merchants, as several Chinese steamers fly the American flag.

meager.[4] Disapproval of the Hongkong Government's action

Coastwise, river, Nanyang lines:
5. Nishin Kisen Kaisha.
6. The Blue Funnel Line.
7. Macao-Canton Steamship Co.
8. Java-Nanyang Line.
9. Australian Line.

At first the strikers were almost all Cantonese. Seamen and coolies from Shanghai and Ningpo, Chekiang, who had their own unions, did not join. Gradually, however, they refused to take jobs which were vacated by their Cantonese comrades. As the shipping companies were sustaining heavy losses by having their ships tied up in Hongkong, they recruited Filipino coolies from Manila and Ningpo coolies from Shanghai at from $1 to $1.20 a day. But this small number of recruits did not materially improve the shipping situation.

Most of the strikers were sent by their union to Canton, partly because of the relatively cheaper living there and partly in order to prevent possible disorder or violence in Hongkong. During the strike each striker whether he belonged to the union or not received a subsidy from it varying from 45 cents to $1 a day, as the union had raised about $300,000 to sustain the strike. Voluntary contributions came from many parts of the country. Railway workers of the Peking-Hankow, Tientsin-Pukow, Peking-Mukden and Peking-Suiyuan lines contributed one day's pay. Seamens' unions in Tientsin and Shanghai held mass meetings to solicit contributions on behalf of the Hongkong strikers. The Returned Laborers' Union, together with the Laborers' League of Shanghai, sent telegrams of sympathy and relief funds to Hongkong.

Dissolution of the Seamen's Union

ON JANUARY 16, the strike had assumed such alarming proportions that the Hongkong Government deemed it necessary to declare martial law in the colony and to place armed military and naval guards at important points to preserve order and to demand passes of those going in and out of the territory. Fearing that scamps might disturb the peace and the strikers be blamed for it, the Seamen's Union organized 8 squads of 10 men each, under a captain, to patrol the streets.

Gradually the actions of the strikers went beyond the control of their leaders and cases of improper picketing and intimidation were alleged to have occurred. On February 1, the Hongkong Government declared the Seamen's Union an unlawful organization with an explanatory note stating that "the order in council was made not because the members of the Seamen's Union had struck for higher wages, but because attempts had been made by the union to paralyze the life of the colony by creating strikes in other employments of workmen who themselves had no grievances against their employers. Were this permitted it would cause widespread distress by interfering with the food supplies of the community and with the carrying on of essential services."

Two days later, two other Chinese labor organizations were declared unlawful on similar grounds. However, evidence of coercive persuasion and intimidation to induce a sympathetic strike seemed

meager.[4] Disapproval of the Hongkong Government's action was expressed by The China Press, a leading American daily in Shanghai (Feb. 5, 1922) in these words:

* * * Immediately after the governor of Hongkong issued his order the police raided the Seamen's Union's headquarters, seizing the office furniture, books, and papers, and closing the premises and putting them under a police guard. This is exactly the kind of procedure that, formerly, Englishmen were accustomed to associate with the police of czardom and the autocratic Hohenzollern régime. Not so very many years ago English workingmen fought a long and strenuous battle to obtain the legal right to strike and they now possess that right. Combination of workmen to secure better conditions for themselves from employers is the only constitutional method they possess, and the united strike is the only effective way for attaining better conditions.[5]

Demands and Efforts to Arbitrate.

SHORTLY after the strike was declared, the seamen's demands were presented to the Governor of Hongkong for a settlement. The rates of increase demanded by the strikers were based upon the prevailing scale of wages, of which the following is an example:

	Monthly wage.
Baker	$22–$25
Boatswain	25– 35
Carpenter	25– 30
Compradore	30– 35
Cook	20– 25
Deck steward	20– 25
Dollar examiner [6]	25
Fireman	40– 65
Kitchen helper	20– 30
Letter carrier	20– 22
Oiler	28– 31
Sailor	22– 25
Servant	20– 30
Waiter	10– 15

The above table shows the monthly wages of a Chinese crew on an ocean-going steamer. It is reported that the highest monthly wage of a Chinese seaman is $65 which is not quite one-fourth that of an European employee of the same rank on another steamer.

On January 17, E. R. Hallifax, Secretary for Chinese affairs, issued a proclamation setting forth the shipowners' terms of settlement. The increases demanded and the terms offered are shown below:

[4] The decision in one of the strongest cases leading to the Governor's proclamation was as follows: "The decision of this court is that you have committed an offense. The charge is that you went on board without permission of the master. It appears to me that your object was to induce members of the crew to leave the ship forthwith, and I find that if they had followed your advice they would have broken their agreement. That is an offense under section 9 of the ordinance which states that it it is an offense for any seaman to violate the agreement. The offense with which you are charged shows that you were going on board to commit an evil action and any who goes on board to break the law can be assumed to have gone on board without permission. The maximum penalty for this offense is a fine of $50. It also states that you can be imprisoned without option. If there had been any evidence that you spoke to the crew, I would have sent you to prison, but as there is no evidence on this point you are fined $50."

[5] Mr. Winston Churchill, the colonial secretary, was heckled when he announced the Hongkong governor's proclamation to the British House of Commons. (The Manchester Guardian, Mar. 7, 1922.)

[6] Detector of counterfeit money.

COMPARISON OF TERMS FINALLY REACHED WITH STRIKERS' ORIGINAL DEMANDS.

INCREASES DEMANDED AND TERMS OFFERED.

Type of steamer.	Increases demanded.	Shipowners' terms.	Difference.
	Per cent.	*Per cent.*	*Per cent.*
1. Coastwise steamers	35.0	15.0	20.0
2. Chinese river steamers	32.5	25.0	7.5
3. Other Chinese steamers	32.5	25.0	7.5
4. Canton, Macao & Hongkong Co. steamers (British)	25.0	15.0	10.0
5. Other British steamers (taking scale of 4 as base)	25.0	15.0	10.0
6. Java Lines	17.5	12.0	5.5
7. Pacific Lines	17.5	7.5	10.0
8. European Lines	17.5	7.5	10.0
9. Australian Lines	20.0	10.0	10.0

Since there was too much discrepancy between the shipowners' terms and the strikers' original demands, the Chinese Seamen's Union on January 27 passed four resolutions modifying their demands:

1. For the time being the arrangements shall be as follows:
   (*a*) An increase of 40 per cent shall be given for wages under $15 a month.
   (*b*) An increase of 30 per cent for wages under $25.
   (*c*) An increase of 20 per cent for wages over $25.
   Resolution 4 (*b*) must be first recognized in respect of these arrangements. If, however, these arrangements are recognized by the shipowners, all seamen will return to work at once and leave resolution 4 to be considered by an arbitration board.
2. The arbitration board shall be established at Canton.
3. The arbitration board shall consist of the following:
   (*a*) Representative of the Canton Government.
   (*b*) Representative of the British consul general.
   (*c*) Representative of the European shipowners.
   (*d*) Representative of the Chinese shipowners.
   (*e*) Representative of the Chinese seamen.
   The number of the members of this board shall be decided by the Chinese and British Governments after due consideration, and this board shall have the full power to settle this strike.
4. The Seamen's Union will lay the following eight demands before the board for consideration:
   (*a*) The increase shall be 30 per cent for all monthly wages over $30, and 40 per cent for those under $30.
   (*b*) No seaman who returns to work after the strike shall be dismissed or degraded for any reason.
   (*c*) The increase shall be applied to all steamers at present anchored at Hongkong or en route to Hongkong from other ports.
   (*d*) All seamen shall be employed through the union, so that no commission is to be paid to the compradores.
   (*e*) No agreement in connection with the employment of the seamen shall have effect unless the Chinese Seamen's Union has been a witness to it.
   (*f*) No seaman or officer of the Seamen's Union in Hongkong shall be banished for any charge which has no proof.
   (*g*) The full increase shall be retroactive to January 1, 1922.
   (*h*) No discrimination shall be practiced against Chinese seamen after they have returned to work and they shall be in no way maltreated.

Terms of the Agreement.

MEDIATORS along the line suggested by the strikers were appointed and held frequent meetings in Hongkong and Canton. They reached an agreement on March 5, the terms of which were as follows:

PRICES OF SPECIFIED ARTICLES OF FOOD ON JANUARY 10 AND JANUARY. 24, 1922,

COMPARISON OF TERMS FINALLY REACHED WITH STRIKERS' ORIGINAL DEMANDS.

Type of steamers.	Terms of settlement.	Strikers' original demands.	Difference.
	Per cent.	*Per cent.*	*Per cent.*
1. Coastwise steamers	20.0	35.0	15.0
2. Chinese river steamers	30.0	32.5	2.5
3. Other Chinese steamers	30.0	32.5	2.5
4. Canton, Macao & Hongkong Co. steamers (British)	20.0	25.0	5.0
5. Other British steamers (taking scale of 4 as base)	20.0	25.0	5.0
6. Java lines	15.0	17.5	2.5
7. Pacific lines	15.0	17.5	2.5
8. European lines	15.0	17.5	2.5
9. Australian lines	15.0	20.0	5.0

On March 6 a gazette extraordinary was issued by the Hongkong Government rescinding the order in council of February 1 which declared the Chinese Seamen's Union an unlawful society. Immediately a fife and drum band led thousands of Chinese seamen in a parade to celebrate their "victory" and to replace the signboard at their old headquarters. Firecrackers and a feast completed their memorable celebration.[7]

Effects of the Strike.

DURING the strike, namely between January 13 and March 5, there was a complete paralysis of industrial life in Hongkong. The manager of a leading restaurant was compelled personally to attend to the provision of food for resident visitors there. Boy scouts operated the electric elevators and acted as messengers. High class Europeans performed their own personal services. Children carried lunches into the city to their elders. Privately owned cars were impressed for public use, and government employees of British birth volunteered for janitor service in government buildings.

Ships having no southern Chinese crews were able to come and go as usual, but the strike of the coal coolies and stevedores rendered it almost impossible to move freight, and cargoes generally were either left in idle ships or carried on to other ports. No river steamers were running and trade with the interior was out of the question.

The importation of food stuffs being stopped temporarily, prices in Hongkong rose suddenly. The following table compares the prices of 14 articles of food on January 10 and January 24, the former date being a few days prior to the strike. The price shows an appreciable increase in every case:

[7] A statement received by the Bureau of Labor Statistics from the United States Shipping Board Emergency Fleet Corporation adds the following information regarding the situation:

"The business community finally brought pressure to bear upon the British colonial authorities to interest themselves in endeavoring to bring about a settlement of the strike, and after some negotiations, on March 13th an agreement was arrived at between the Government authorities and the steamship lines other than the representatives of the United States Shipping Board vessels to grant an increase in wages to the seamen of 15 per cent on all shore vessels and 20 per cent on coasting vessels.

"In addition to this, the strikers demanded and were given a guaranty by the Colonial Government that they would receive their full wages during the entire period they were out on strike, which was approximately two months. Colonial Government authorities even went so far as to guarantee to the strikers that if for any reason the United States Shipping Board declined or was not in a position to allow pay to the strikers while on strike, the British Government would reimburse the strikers for payments not made by the United States Shipping Board.

"The Shipping Board agreed to the increase of 15 per cent in wages, but declined absolutely to pay wages to the strikers while on strike, feeling this was a most unfortunate precedent and one which was bound to create trouble in the future."

and Forestry of the United States Senate in connection with a discussion regarding the establishment of a forest experiment station in the

PRICES OF SPECIFIED ARTICLES OF FOOD ON JANUARY 10 AND JANUARY. 24, 1922, AND PER CENT OF INCREASE.

Article.	Price per pound on—		Per cent of increase.	Article.	Price per pound on—		Per cent of increase.
	Jan. 10.	Jan. 24.			Jan. 10.	Jan. 24.	
Barbel	$0.13	$0.32	146.2	Duck	$0.28	$0.32	14.3
Beef, sirloin	.20	.30	50.0	Garrupa [1]	.45	.52	15.6
Beefsteak	.19	.30	57.9	Lobsters	.32	.40	25.0
Capon	.32	.44	37.5	Mutton	.34	.40	17.6
Chicken	.34	.42	23.5	Pork	.20	.26	30.0
Codfish	.24	.28	16.7	Rice	.13	.22	69.2
Crabs	.36	.40	11.1	Salmon	.40	.60	50.0

[1] A kind of fish.

Describing business conditions during the strike, an eyewitness says: "The Chinese shops as well as European are mostly only partially open. The banks are functioning with armed volunteers within the vestibule. The business houses are staffed as usual but are partially depleted of their Chinese employees, and there is an absence of transactions. A few straggling rickshas and chairs are the only visible evidence of public vehicular traffic."

On the whole, the strike was carried on in an orderly manner. Only on March 4 was a case of violence noted. After the dissolution of the Seamen's Union, the strike situation became more serious and the Hongkong Government closed the passenger traffic of the Canton-Kowloon Railway in order to prevent more strikers from leaving the colony. On March 4, about 2,000 domestics decided to go on foot to Canton. On reaching the Kowloon frontier, they broke through the British cordon without the required passes. As the strikers refused to come back, a warning shot was fired. This proving ineffective, several volleys were fired which killed three strikers and wounded eight. The Seamen's Union now demands a satisfactory and just settlement of this case.

The removal of certain legal restrictions prejudicial to labor may result from this strike. At a recent conference of the State Council of the Canton Government, the president of the court of revision proposed to abrogate article 224 and other subsections of Chapter XVI of the Chinese Criminal Code, which provides penalties for persons on strike. He contended that the provision is in contravention of the principle of criminal lawmaking, a humane conception of crimes and criminal intentions, the criminal law generally adopted in other countries, and the tendency of the times. The measure is now in the Chinese Parliament for discussion.

Necessity for Conservation of Forests in the Southern States.

THE urgent need of a more careful conservation of the forests of the South Atlantic and Gulf States was emphasized in a letter [1] under date of May 12, 1921, written by the Secretary of Agriculture, Mr. Wallace, to the chairman of the Committee on Agriculture

[1] Congressional Record, Washington, Mar. 24, 1922.

Adequate protection of this one of our most valuable natural

and Forestry of the United States Senate in connection with a discussion regarding the establishment of a forest experiment station in the State of Florida.

The Secretary stated that the original pine forests of this section of the United States covered from 125,000,000 to 130,000,000 acres, having a stand of timber close to 650,000,000,000 feet. Since 1870, and largely since 1890, four-fifths of this stand has been cut away and in such a manner that 31,000,000 acres are wholly unproductive and an additional 60,000,000 only partially productive. The total cut of the southern yellow pine is now about three times the annual growth, while the present cut of saw timber is more than four times the annual growth. This means a serious diminution in the production of southern yellow pine, which for over 20 years has constituted the greater part of the softwood timber cut of the country. A recent survey of 5,400 mills which own or control most of the remaining virgin stand in the South indicates that nearly 82 per cent of these mills will cut out their timber in five years or less and that over 97 per cent of the mills will cut out their timber in 10 years or less. This constantly increasing reduction in the pine timber output will be keenly felt not only in the South, where one-third of its total lumber cut is at present consumed, but also in the Northeastern, Central, and Middle Western States where yellow pine has for many years since the exhaustion of white pine in the Lake States been a standard building material.

Furthermore, the steady depletion of the southern timber supply, coupled with destructive methods of turpentining, menaces the production of naval stores in which, for the last century, America has led the world and which at present constitutes approximately 80 per cent of the total world production. Recent estimates indicate that in 10 years the production of gum naval stores in the southern pine belt will be so greatly reduced that both United States and export markets must secure their principal supplies elsewhere. The production of naval stores in North Carolina and South Carolina is now negligible; Georgia and Alabama will be practically eliminated as large producers within 5 years, Florida and Mississippi in 8 years, Texas in 10 years, and Louisiana in 15 years.

As regards the other species of timber in the South, Mr. Wallace also said the best-informed lumbermen believe that the present cut of cypress will not be more than 10 years in duration. Moreover, the cut of valuable hardwoods such as oak, red gum, ash, and cottonwood, in the southern Mississippi Valley, is increasing and it is only a question of time when these virgin stands will be replaced by culled second growth stands which are always deficient in both quantity and quality. The fertile bottom lands will eventually be cleared for agriculture but there are large areas particularly in the upland which can and should be devoted to the permanent production of timber. In the Secretary's opinion the present timber situation in the South is so serious that unless the productivity of the forest lands of that section is both maintained and increased the effects will be felt at no very distant day in a growing scarcity of lumber and correspondingly increased prices throughout the United States east of the Rocky Mountains.

Adequate protection of this one of our most valuable natural resources requires, in the Secretary's opinion, constant and extensive investigations on the part of thoroughly trained men, which are best conducted from well-equipped forest stations in the region under observation. Among the essential forestry problems suggested by the Secretary for study in such a station in the Southern States are the following: (1) Methods of cutting to use with various species of southern yellow pine and hardwoods in order to secure satisfactory natural reproduction of the most desirable species; (2) artificial reforestation of denuded or cut-over areas, either by direct seeding or by planting; (3) care of young stands in order to secure maximum growth of desirable species; (4) methods and effects of forest fire protection; (5) effect of grazing on forest-tree reproduction, with special reference to hog grazing and long-leaf pine, which in certain regions and under certain conditions appears to be severely damaged by such grazing; (6) rate of growth and volume per acre yielded by different species at different ages and in stands of various densities in different parts of the region and under different soil conditions; (7) methods of turpentining, with a view to securing maximum yields with minimum damage to trees affected.

INDUSTRIAL RELATIONS AND LABOR CONDITIONS.

Antnracite Miners' Demands and Operators' Reply at Joint Conference.[1]

AT THE joint conference held on March 15, 1922, in New York City between representatives of the anthracite coal operators and the anthracite miners' tridistrict scale committee the following 19 demands, which were adopted by the tridistrict convention of miners at Shamokin, Pa., last January. were formally presented to the operators:

1. We demand that the next contract be for a period not exceeding two years and that the making of individual agreements and contracts in the mining of coal shall be prohibited, and where mechanical loading is done the committee and company officials shall have authority to establish proper rates.

2. We demand that the contract wage scale shall be increased 20 per cent and that all day men be granted an increase of $1 per day; and further, that the differential in cents per day existing between classifications of labor previous to the award of the United States Anthracite Coal Commission shall be restored and that the rates applied in solid mining shall be the minimum rate on pillar work or second mining.

3. In conformity with the thought expressed in the award of the United States Anthracite Coal Commission we demand that a uniform wage scale be established so that the various occupations of like character at the several collieries shall command the same wage.

4. We demand that the provisions of the eight-hour day clause in the present agreement shall be applied to all persons working in or around the anthracite collieries coming under the jurisdiction of the United Mine Workers of America, regardless of the occupations, and that in the bringing of these employees under the eight-hour day their basis shall be arrived at in the same manner as the basis was arrived at in the case of pumpmen and engineers, plus the increase demanded in section 2 of this document.

5. We demand time and half time for all overtime and double time for Sunday and holiday work.

6. We demand that the next contract made between representatives of the anthracite operators and the United Mine Workers of America shall contain a standard check-off provision.

7. We demand that all dead work shall be paid for on a uniform consideration basis and that where more than one miner is employed they shall all receive the same rate.

8. We demand payment for all sheet iron, props, timber, forepoling, extra and abnormal shoveling and cribbing, and where miners are prevented from working on account of lack of supplies that they be accorded the opportunity of making a shift at some other work at the consideration rate.

9. We demand in the settlement of grievances that the aggrieved parties shall have the right to demand settlement upon a basis of equity, and if such equity settlement is requested, the conditions of 1902 shall not enter into or prejudice the case.

10. We demand that a uniform rate of 17 cents per inch be paid for all refuse in all kinds of mining up to 10 feet wide and a proportional rate be applied for over 10 feet, with the understanding that this is to be a minimum rate not affecting higher rates that exist.

11. We demand that where coal is paid for by the car it shall be changed and payment shall be made on the legal ton basis of 2,000 pounds, and that dockage shall be eliminated.

[1] United Mine Workers Journal, Indianapolis, April 1, 1922.

basic commodity which has not receded in cost of production since the war. In fact, costs of anthracite production to-day are far above the war-time peak.

12. We demand that where jack hammers are necessary and of advantage in the work that they be furnished free of charge to miner or miners, including the power necessary to operate the machine.

13. We demand a more liberal and satisfactory clause in the agreement covering the question of miners who encounter abnormal conditions in their working places, and that to correct this situation the following quotation: "Unless otherwise directed by the foreman," shall be stricken from the agreement covering this particular subject, and that the consideration rate at each colliery should be equivalent to the average daily earnings of contract miners under normal conditions.

14. We demand that the wage schedules be brought up to date, containing all new rates and occupations, and that copies be supplied the committees and filed with the board of conciliation.

15. We demand that carpenters and other tradesmen be paid the recognized standard rates existing in the region, which rate should not be less than 90 cents per hour, and which trade rate should be paid to all those who have served four years at their particular trade.

16. We demand that in retrenchment, the laying off of men, and in the rehiring that seniority shall apply.

17. We demand that employees of stripping contractors be brought under the general agreement on their present basis of wages and conditions plus the increase demanded in section 2 hereof.

18. We demand that powder be delivered to the miners at their working places, or as convenient as possible to the working place, in a safe and careful manner, by the company.

19. We demand that full eight-hour opportunity be given to employees at collieries which have been working as a general schedule on a six and seven hour day, and that where eight-hour opportunity is denied to those employees their wages shall be readjusted. This demand is based upon normal working conditions and does not contemplate the inclusion of accidents.

The operators' reply, submitted upon the reconvening of the joint conference on March 17, reads as follows:

The object of this conference should be to construct a working agreement which will, in contrast with conditions in other coal fields, continue to afford a basis whereby the anthracite industry will provide fair wages, full-time employment to its workers, and a maximum production of coal at a cost which will enable it to be sold to its customers at a price they are able to pay.

The consuming public is largely composed of wage earners in other industries who have already accepted substantial decreases in their earnings and who can not continue to pay present prices in order that the workmen in the anthracite field may hold their present scale of wages.

With these facts in mind, the general policies committee is authorized to say in reply to your communication to the Joint Conference of Anthracite Operators and Miners, embodying 19 demands to be used as the basis of an agreement to take the place of the one now in effect, which expires March 31, next:

"Careful consideration has been given to the demands and to the explanatory remarks made by the speakers at the joint conference.

"It should be stated in the first place that the anthracite operators are not unwilling to continue contractual relations with the United Mine Workers of America, but on the contrary, are willing to continue the practice of dealing with that organization as representing their employees, provided that the form of contract is in accord with the principles laid down by the Anthracite Coal Strike Commission appointed by President Roosevelt in 1902 and the Anthracite Coal Commission appointed by President Wilson in 1920; and, provided further, that the jurisdiction of the board of conciliation that has been a potent factor in the preservation of peace in the anthracite region shall not be questioned or abridged.

"The operators are ready to consider and discuss any proposition relating to wages and working conditions submitted by either party.

"When it comes to matters affecting the cost of production there is another party to be considered, viz, the buyer. Any adjustment which is not satisfactory to the buyer must inevitably fail; for in that event production can not be distributed, and the miner will then lose his opportunity for employment.

"The interests of all parties will best be conserved by steady work for the miner, maximum production at the mines, and the widest possible market for the product. To secure this, a reasonable cost of production is necessary. Anthracite is the only

basic commodity which has not receded in cost of production since the war. In fact, costs of anthracite production to-day are far above the war-time peak.

"The deflated pocketbook of the buyer can not continue to pay the present prices. Economy is being practiced by the consumer, and various substitutes for anthracite are being used. But for the fear on the part of the public of a suspension April 1, the recent movement of anthracite would have been even less than it was, with the result of short-time employment throughout the region. The economic situation to-day not only forbids any increase in costs and prices, but compels a reduction.

"Anthracite labor is the only group in this country which has not sustained decrease in wages in line with the general readjustment in other industries, nor has it suffered a material decline in the opportunity for steady work.

"Deflation in the cost of production, 70 per cent of which is represented by mine labor, is imperative. The anthracite operators, after most careful thought, can see no alternative. Readjustment of the wage rates is the first necessary step to reduce the cost of anthracite to the consumer and to insure continued stability in the industry.

"It is obvious, then, that prosperity and steady work in the anthracite fields must cease unless the price of anthracite coal can be reduced to a figure which the consumer can pay.

"We are confident that if in our negotiations this absolutely controlling factor is kept constantly in mind, we shall be able to reach a conclusion which will promote the welfare of all concerned. And with this hope we are prepared to consider through the negotiating committee any matter pertaining to wages and working conditions presented by either party."

Report of the New Jersey Chamber of Commerce Industrial Relations Committee.[1]

THE report of the committee on industrial relations of the New Jersey State Chamber of Commerce, which was adopted by the chamber's board of trustees January 26, 1922, was prepared after a study covering a period of nine months.

The committee broadly classifies the fundamental causes of differences between employers and workers as follows:

1. The issue between wages (including hours of labor and security of employment) and profits.

2. The issue between the workers' democratic aspirations and what employers regard as their own "domain of power."

3. The issue concerning certain abuses on one side or the other, as, for example, ill treatment by foremen, unjustified discharge, discrimination against members of the union, soldiering on the job, nonobservance of shop discipline, and discrimination against nonunion workers.

The report cites three methods which are being used by employers to meet these issues: (1) Constructive achievement within their own shops, (2) constructive industry-wide scope cooperation between employers' and employees' organizations, and (3) "antiunion coercion."

In the summary of findings the committee declares that the last-named method should be "by all means avoided." The other two methods are strongly advocated in order to avert "disastrous results," the measure to be chosen depending upon the character of the union, the employer, and the industry.

[1] "New Jersey," vol. 8, No. 10. Published by The Investors' League of the New Jersey Chamber of Commerce, Newark, N. J.

class of workers who, although ambitious and industrious, have found it difficult if not impossible to save an amount sufficient to

Special Recommendations.

THE committee, recognizing that industrial personnel management should be as thorough and as scientific as the management of physical production problems, suggested that—

(1) There should be developed in our State departments of labor expert consulting services that would spread among employers the knowledge of improved methods of handling personnel.

(2) Employers' associations and chambers of commerce should foster the development within their own bodies of such expert consulting services. We particularly recommend that the New Jersey State Chamber of Commerce, as a civic agency, undertake this work.

(3) Employers should take the initiative in establishing in their own shops personnel departments; or where, on account of size, this is impracticable, advice on personnel problems should be secured elsewhere.

(4) There should be greater appreciation by labor, organized as well as unorganized, of the benefits which may come through the efforts of experts in enlightened management of the personnel.

It was also recommended:

That the establishment of carefully planned and fair shop representation should be encouraged.

That in the constitution of committees to deal with unemployment, workmen's compensation, and other problems vitally affecting labor, employers, and the public, the State chamber should make an effort to have representatives of union labor as well as of the other interests involved.

That the State chamber's committees should continue and further develop the practice of basing their discussions upon investigations conducted by its Bureau of State Research; of maintaining such research work entirely independent of any dictation from the chamber's officers or members as to the character of facts or conclusions to be submitted; of publishing the reports of the Bureau of State Research unsubjected to censorship; and of merely seeing that the investigators are thorough and unprejudiced students and fearless workers.

The committee called upon both organized employers and employees wherever they carry on negotiations with each other to multiply their endeavors to purge themselves "of those domineering and abusive practices which stand in the way of their greater usefulness, and to develop more consistently the rule of reason in their dealings and such constructive experiments of industry-wide cooperation between them as have been begun."

In conclusion the committee advocated that all concerned should direct their efforts toward the formulation of methods for regularizing industry and reducing and preventing unemployment, and that a study of the subject should be undertaken by the Chamber's Bureau of State Research.

Service Payments for Workers.

IN AN article on "'Income building' for the worker," by Edward E. Rice, in Management Engineering, April, 1922 (pp. 202–204), a plan is advanced for securing financial independence for that large

class of workers who, although ambitious and industrious, have found it difficult if not impossible to save an amount sufficient to secure their financial independence in old age.

The only advice which leaders of industry have usually been able to offer as a solution to the workers' financial problem is "to work and save"; and while the habit of thrift which started under the patriotic impulse of the war had very definite results, the writer thinks that the unemployment crisis has broken this habit and discouraged workers generally in attempts to accumulate any considerable sum of money. Records of savings institutions show that saving is not a permanent habit except with a very few, and as a result 97 per cent of all males at the age of 65 depend for their support either on their own daily earnings or on those of others. In order to make it possible for both wage and salaried workers to accumulate funds sufficient to insure independence at a time when earning power has either diminished or entirely disappeared the author advocates the development of what he terms "income building." This plan is built upon the recognition by each business or industry of its obligation to those employees who render satisfactory service and who continue permanently in its employ. While he considers mobility of labor a good thing up to a certain point, he also believes that individual fitness for the job should not be interfered with. It is seldom that continued service is rewarded in any concrete manner, the worker who has been 10 years on the job receiving generally the same rate as the worker of a year or less. The man who has been employed continuously for 10 years or more, however, has saved his employer the cost of hiring and training several new workers to take his place, since the average length of service is considerably less than 10 years.

Simply as a good business policy, therefore, the writer believes that employers can afford to lay aside each year an amount varying from 2 to 10 per cent of the employee's earnings, which he calls "service earnings," which represent a part of the saving which the continuous-service employee has effected for the business. The increases in salary from year to year of workers paid on a salary basis may be considered as due to increased efficiency and should not be considered in any degree a service recognition allowance. The service earnings should be set aside each year for the completion of certain predetermined periods of service. In addition to the payments of the employer the employee should be encouraged to save a certain per cent of his earnings, to be invested, together with the employer's payments, in a fund which is separate from and not dependent in any way upon the success or failure of the business. These amounts are to become the property of the employee after he has completed a definite period of service. Under this system an employee at the end of 5 or 10 years' service would have an accumulation to his credit equal to 1 or 2 years' wages or salary, and after 25 or 30 years the amount would be large enough to yield a permanent income varying from one-half to all of his yearly earnings according to the percentage of contribution. The funds could be administered so as to provide insurance for sickness and accident not coming under the compensation act of the State, and in event of death the family would receive

department. In one establishment where a works committee on the Whitley plan has been organized for three years the scope of its oper-

an amount equal to the worker's share at the end of the 5 or 10 year period.

The advantages of the plan include a financial guaranty to the worker which is in no way dependent on the business or industry or its future solvency; it eliminates the necessity for gratuitous pension systems, which give no definite guaranty to the workers; and the costs are not prohibitive for the employer, since much of the cost would be absorbed in the greater stability and productiveness of the organization.

Welfare Work for Industrial Employees in Great Britain.

DEVELOPMENTS in welfare work in industrial and commercial establishments in Great Britain during the past few years are discussed in an article on "Industrial welfare work in Great Britain," by Elizabeth D. Newcomb, in the International Labor Review, April, 1922 (pp. 553–571).

The writer points out that a quite different conception of what constitutes welfare work prevails in Great Britain from that accepted in the United States. In this country the term has been generally understood to cover measures for improving the comfort, health, and intellectual and social well-being of employees or their families which are voluntarily provided by employers, while the same term in Great Britain covers much of what we group under employment management and industrial relations, including works councils, and the welfare worker's duties generally include those of employment manager. It should be pointed out, however, that while the duties of employment managers and welfare secretaries in the United States were in the earlier years quite distinct there has been a tendency in recent years to unite these two departments. Full-time welfare workers in Great Britain were estimated to number about 600 in 1921, although during the stress of war work there were about 1,000 such workers. They are organized professionally into the Welfare Workers' Institute, which was founded in 1913 under the name of the Welfare Workers' Association. Special training for welfare workers is offered by various universities and colleges, consisting of a two years' course for non-graduates and a one year's course for graduates. In addition to attendance at lectures and tutorial classes there is "actual participation under supervision in various social activities, which will give the candidate some first-hand acquaintance with working-class life, the operation of public departments, and of voluntary organizations for social work."

In line with the trend away from paternalism and toward participation by the workers in management, the idea of welfare, the writer states, is becoming merged in the new development of cooperation between worker and employer for the benefit of all, so that a great deal of this work includes not only the activities of the welfare worker but also the activities of the works committees or works councils. In many instances where a representative works committee has been developed the welfare worker has become the secretary of the committee, and the committee largely controls the policy of the welfare

department. In one establishment where a works committee on the Whitley plan has been organized for three years the scope of its operations has been gradually widened until it now has a board of review through which a discharged employee may have his case examined if he thinks he has been unfairly dismissed. This same committee has also undertaken the organization of all the workers in the factory in trade-unions and endeavored, though unsuccessfully, to have the company make union membership a condition of employment. Membership in a trade-union is an essential condition for membership in a works committee in a number of establishments.

While the attitude of the trade-unions before and during the war was decidedly antagonistic to welfare work, the writer says that since 1918 organized labor has gradually been becoming more friendly, particularly as a more democratic form of welfare organization based on the works committees has developed.

In conclusion the writer says that although welfare work is still in an experimental stage it "will undoubtedly be a force to be reckoned with in the industry of the future, more especially because it is sufficiently elastic to be adapted to any form of enterprise and any type of industrial control."

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE MARCH 15, 1922, COMPARED WITH MARCH 15, 1921, AND FEBRUARY 15, 1922—Concluded.

PRICES AND COST OF LIVING.

Retail Prices of Food in the United States.

THE following tables are based on figures which have been received by the Bureau of Labor Statistics from retail dealers through monthly reports of actual selling prices.[1]

Table 1 shows for the United States retail prices of food on March 15, 1921, and on February 15, and March 15, 1922, as well as the percentage changes in the year and in the month. For example, the price of potatoes was 2.5 cents per pound on March 15, 1921; 3.3 cents per pound on February 15, 1922; and 3.1 cents per pound on March 15, 1922. These figures show an increase of 24 per cent in the year, but a decrease of 6 per cent in the month.

The cost of the various articles of food,[2] combined, showed a decrease of 11 per cent in March, 1922, as compared with March, 1921, and a decrease of 2 per cent in March, 1922, as compared with February, 1922.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE MARCH 15, 1922, COMPARED WITH MARCH 15, 1921, AND FEBRUARY 15, 1922.

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers.]

Article.	Unit.	Average retail price on—			Per cent of increase (+) or decrease (−) Mar. 15, 1922, compared with—	
		Mar. 15, 1921.	Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15, 1921.	Feb. 15, 1922.
		Cents.	*Cents.*	*Cents.*		
Sirloin steak	Pound	39.1	35.2	35.9	− 8	+ 2
Round steak	do	34.9	30.2	30.8	− 12	+ 2
Rib roast	do	30.0	26.5	26.9	− 10	+ 2
Chuck roast	do	22.5	18.9	19.3	− 14	+ 2
Plate beef	do	15.7	12.8	13.0	− 17	+ 2
Pork chops	do	35.3	29.3	31.3	− 11	+ 7
Bacon	do	41.9	37.9	39.0	− 7	+ 3
Ham	do	48.8	46.5	49.7	+ 2	+ 7
Lamb	do	34.4	35.4	37.5	+ 9	+ 6
Hens	do	43.2	36.9	37.8	− 13	+ 2
Salmon, canned, red	do	38.8	32.9	32.6	− 16	− 1
Milk, fresh	Quart	15.2	13.2	13.0	− 14	− 2
Milk, evaporated	15–16 oz. can	14.6	11.6	11.3	− 23	− 3
Butter	Pound	57.6	45.9	45.8	− 20	− 0.2

[1] In addition to monthly retail prices of food and coal, the bureau secures prices of gas and dry goods from each of 51 cities. Previous to 1921 prices of gas were published only in the June issue, but beginning in 1921 they appear in the July and November issues. Dry goods prices previously appeared regularly in the April, July, October, and December issues, but beginning with this issue they will appear in the May, August, November, and February issues of the MONTHLY LABOR REVIEW.

[2] The following 22 articles, weighted according to the consumption of the average family, have been used from January, 1913, to December, 1920: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, rice, coffee and tea. The remainder of the 43 articles shown in Tables 1 and 2 have been included in the weighted aggregates for each month, beginning with January, 1921.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE MARCH 15, 1922, COMPARED WITH MARCH 15, 1921, AND FEBRUARY 15, 1922—Concluded.

Article.	Unit.	Average retail price on—			Per cent of increase (+) or decrease (−) Mar. 15, 1922, compared with—	
		Mar. 15, 1921.	Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15, 1921.	Feb. 15, 1922.
		Cents.	*Cents.*	*Cents.*		
Oleomargarine	do	34.0	28.3	27.9	− 18	− 1
Nut margarine	do	31.0	27.5	27.0	− 13	− 2
Cheese	do	39.0	32.9	33.0	− 15	+ 0.3
Lard	do	19.6	15.9	17.3	− 12	+ 9
Crisco	do	24.6	21.7	21.9	− 11	+ 1
Eggs, strictly fresh	Dozen	41.7	48.4	31.8	− 24	−34
Bread	Pound	10.5	8.6	8.7	− 17	+ 1
Flour	do	6.4	5.1	5.3	− 17	+ 4
Corn meal	do	4.8	3.9	3.9	− 19	0
Rolled oats	do	10.2	8.9	8.8	− 14	− 1
Corn flakes	8-oz. package	13.2	10.3	10.2	− 23	− 1
Cream of wheat	28-oz. package	29.9	26.2	26.0	− 13	− 1
Macaroni	Pound	21.0	20.2	20.2	− 4	0
Rice	do	9.8	9.3	9.3	− 5	0
Beans, navy	do	8.4	8.3	8.9	+ 6	+ 7
Potatoes	do	2.5	3.3	3.1	+ 24	− 6
Onions	do	3.8	10.9	11.6	+205	+ 6
Cabbage	do	4.2	5.7	5.4	+ 29	− 5
Beans, baked	No. 2 can	15.1	13.3	13.2	− 13	− 1
Corn, canned	do	16.7	15.9	15.7	− 6	− 1
Peas, canned	do	18.0	17.8	17.7	− 2	− 1
Tomatoes, canned	do	11.8	13.4	13.6	+ 15	+ 1
Sugar, granulated	Pound	9.7	6.4	6.5	− 33	+ 2
Tea	do	71.1	67.8	67.5	− 5	− 0.4
Coffee	do	37.1	35.6	35.6	− 4	0
Prunes	do	20.9	18.8	19.2	− 8	+ 2
Raisins	do	31.7	24.8	24.6	− 22	− 1
Bananas	Dozen	41.6	36.8	36.8	− 12	0
Oranges	do	43.7	48.5	53.9	+ 23	+11
All articles combined [1]					− 11	− 2

[1] See note 2, p. 25.

Table 2 shows for the United States average retail prices of specified food articles on March 15, 1913 and 1914, and on March 15 of each year from 1917 to 1922, together with the percentage changes in March of each of these specified years compared with March, 1913. For example, the price of fresh milk per quart was 8.9 cents in March, 1913; 9 cents in March, 1914; 10 cents in March, 1917; 13.4 cents in March, 1918; 15.3 cents in March, 1919; 16.6 cents in March, 1920; 15.2 cents in March, 1921; and in March, 1922, 13 cents. As compared with the average price in March, 1913, these figures show the following percentage increases: 1 per cent in March, 1914; 12 per cent in March, 1917; 51 per cent in March, 1918; 72 per cent in March, 1919; 87 per cent in March, 1920; 71 per cent in March, 1921; and 46 per cent in March, 1922.

TABLE 3.—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR $1, IN EACH YEAR, 1913 TO 1921, AND IN MARCH, 1922.

TABLE 2.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE MARCH 15 OF CERTAIN SPECIFIED YEARS COMPARED WITH MARCH 15, 1913.

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers.]

Article.	Unit.	Average retail price Mar. 15—								Per cent of increase (+) or decrease (−) Mar. 15 of each specified year compared with Mar. 15, 1913.						
		1913	1914	1917	1918	1919	1920	1921	1922	1914	1917	1918	1919	1920	1921	1922
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.							
Sirloin steak	Pound	24.7	25.3	29.5	33.8	41.8	40.8	39.1	35.9	+2	+ 19	+ 37	+ 69	+ 65	+ 58	+ 45
Round steak	...do	21.3	22.9	26.6	31.8	39.4	37.5	34.9	30.8	+8	+ 25	+ 49	+ 85	+ 76	+ 64	+ 45
Rib roast	...do	19.4	20.0	23.3	26.8	33.4	31.9	30.0	26.9	+3	+ 20	+ 38	+ 72	+ 64	+ 55	+ 39
Chuck roast	...do	15.6	16.3	20.4	23.2	28.4	25.1	22.5	19.3	+4	+ 31	+ 49	+ 82	+ 61	+ 44	+ 24
Plate beef	...do	11.8	12.4	14.6	18.2	22.1	18.2	15.7	13.0	+5	+ 24	+ 54	+ 87	+ 54	+ 33	+ 10
Pork chops	...do	20.3	20.9	28.0	33.9	38.6	39.1	35.3	31.3	+3	+ 38	+ 67	+ 90	+ 93	+ 74	+ 54
Bacon	...do	26.1	26.6	33.3	48.8	54.9	50.2	41.9	39.0	+2	+ 28	+ 87	+110	+ 92	+ 61	+ 49
Ham	...do	26.0	26.5	33.6	44.1	51.4	51.2	48.8	49.7	+2	+ 29	+ 70	+ 98	+ 97	+ 88	+ 91
Lamb	...do	19.1	18.9	26.2	31.7	38.0	39.8	34.4	37.5	−1	+ 37	+ 66	+ 99	+108	+ 80	+ 96
Hens	...do	21.4	22.4	27.5	....	41.1	45.7	43.2	37.8	+5	+ 29	.....	+ 92	+114	+102	+ 77
Salmon (canned), red.	...do	....	....	22.2	29.5	32.1	37.6	....	32.6	.....	.....	.....	.....	.....	.....	.....
Milk, fresh	Quart	8.9	9.0	10.0	13.4	15.3	16.6	15.2	13.0	+1	+ 12	+ 51	+ 72	+ 87	+ 71	+ 46
Milk, evaporated (unsweetened).	15-16 oz. can.	....	....	....	....	15.3	15.1	14.6	11.3	.....	.....	.....	.....	.....	.....	.....
Butter	Pound	41.4	35.0	46.2	55.2	66.5	75.2	57.6	45.8	−15	+ 12	+ 33	+ 61	+ 82	+ 39	+ 11
Oleomargarine	...do	....	....	....	....	39.0	43.1	34.0	27.9	.....	.....	.....	.....	.....	.....	.....
Nut margarine	...do	....	....	....	....	35.5	36.1	31.0	27.0	.....	.....	.....	.....	.....	.....	.....
Cheese	...do	22.1	23.1	32.3	35.1	40.5	42.8	39.0	33.0	+5	+ 46	+ 59	+ 83	+ 94	+ 76	+ 49
Lard	...do	15.6	15.6	23.9	33.2	33.4	30.4	19.6	17.3	0	+ 53	+113	+114	+ 95	+ 26	+ 11
Crisco	...do	....	....	....	....	33.2	37.5	24.6	21.9	.....	.....	.....	.....	.....	.....	.....
Eggs, strictly fresh	Dozen	26.4	30.9	34.7	44.3	48.3	55.6	41.7	31.8	+17	+ 31	+ 68	+ 83	+111	+ 58	+ 20
Bread	Pound	5.6	6.2	8.1	9.6	9.8	11.2	10.5	....	+11	+ 45	+ 71	+ 75	+100	+ 88	.....
Flour	...do	3.3	3.3	5.8	6.6	6.8	8.0	6.4	5.3	0	+ 76	+100	+106	+142	+ 94	+ 61
Corn meal	...do	2.9	3.1	4.1	7.2	5.9	6.5	4.8	3.9	+7	+ 41	+148	+103	+124	+ 66	+ 34
Rolled oats	...do	....	....	....	....	8.3	10.3	10.2	8.8	.....	.....	.....	.....	.....	.....	.....
Corn flakes	8-oz. pkg.	....	....	....	....	14.1	14.1	13.2	20.4	.....	.....	.....	.....	.....	.....	.....
Cream of wheat	28-oz. pkg.	....	....	....	....	25.1	29.7	29.9	14.8	.....	.....	.....	.....	.....	.....	.....
Macaroni	Pound	....	....	....	....	19.3	20.2	21.0	20.2	.....	.....	.....	.....	.....	.....	.....
Rice	...do	8.6	8.7	9.1	12.0	13.4	18.4	9.8	9.3	+1	+ 6	+ 40	+ 56	+114	+ 14	+ 8
Beans, navy	...do	....	....	15.4	18.1	12.5	11.9	8.4	8.9	.....	.....	.....	.....	.....	.....	.....
Potatoes	...do	1.5	1.8	5.0	2.5	2.9	6.8	2.5	3.1	+20	+233	+ 67	+ 93	+353	+ 67	+107
Onions	...do	....	....	12.5	4.0	6.0	9.4	3.8	11.6	.....	.....	.....	.....	.....	.....	.....
Cabbage	...do	....	....	....	....	5.3	8.7	4.2	5.4	.....	.....	.....	.....	.....	.....	.....
Beans, baked	No. 2 can	....	....	....	....	18.1	16.8	15.1	10.6	.....	.....	.....	.....	.....	.....	.....
Corn, canned	...do	....	....	....	....	19.3	18.5	16.7	12.6	.....	.....	.....	.....	.....	.....	.....
Peas, canned	...do	....	....	....	....	19.0	19.0	18.0	14.2	.....	.....	.....	.....	.....	.....	.....
Tomatoes, canned	...do	....	....	....	....	16.4	15.1	11.8	10.9	.....	.....	.....	.....	.....	.....	.....
Sugar, granulated	Pound	5.4	5.1	8.8	9.2	10.6	18.7	9.7	6.5	−6	+ 63	+ 70	+ 96	+246	+ 80	+ 20
Tea	...do	54.3	54.5	54.7	61.5	70.4	73.2	71.1	67.5	+0.4	+ 1	+ 13	+ 30	+ 35	+ 31	+ 24
Coffee	...do	29.8	29.7	30.0	30.4	37.6	49.1	37.1	35.6	−0.3	+ 1	+ 2	+ 26	+ 65	+ 24	+ 19
Prunes	...do	....	....	14.1	16.5	20.9	28.7	20.9	19.2	.....	.....	.....	.....	.....	.....	.....
Raisins	...do	....	....	14.1	15.1	16.4	26.4	31.7	24.6	.....	.....	.....	.....	.....	.....	.....
Bananas	Dozen	....	....	....	....	36.6	41.4	41.6	36.8	.....	.....	.....	.....	.....	.....	.....
Oranges	...do	....	....	....	....	53.2	62.0	43.7	53.9	.....	.....	.....	.....	.....	.....	.....
All articles combined [1].		....	....	....	....	....	....	....	....	+2	+ 37	+ 59	+ 81	+106	+ 61	+ 43

[1] See note 2, p. 25.

Table 3 shows the changes in the retail price of each of 22 articles of food [3] as well as the changes in the amounts of these articles that could be purchased for $1, each year, 1913 to 1921, and in March, 1922.

[3] Although monthly prices of 43 food articles have been secured since January, 1919, prices of only 22 of these articles have been secured each month since 1913.

TABLE 3.—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR $1, IN EACH YEAR, 1913 TO 1921, AND IN MARCH, 1922.

Year.	Sirloin steak.		Round steak.		Rib roast.		Chuck roast.		Plate beef.		Pork chops.	
	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.
	Per lb.	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*
1913	$0.254	3.9	$0.223	4.5	$0.198	5.1	$0.160	6.3	$0.121	8.3	$0.210	4.8
1914	.259	3.9	.236	4.2	.204	4.9	.167	6.0	.126	7.9	.220	4.5
1915	.257	3.9	.230	4.3	.201	5.0	.161	6.2	.121	8.3	.203	4.9
1916	.273	3.7	.245	4.1	.212	4.7	.171	5.8	.128	7.8	.227	4.4
1917	.315	3.2	.290	3.4	.249	4.0	.209	4.8	.157	6.4	.319	3.1
1918	.389	2.6	.369	2.7	.307	3.3	.266	3.8	.206	4.9	.390	2.6
1919	.417	2.4	.389	2.6	.325	3.1	.270	3.7	.202	5.0	.423	2.4
1920	.437	2.3	.395	2.5	.332	3.0	.262	3.8	.183	5.5	.423	2.4
1921	.388	2.6	.344	2.9	.291	3.4	.212	4.7	.143	7.0	.349	2.9
1922: March	.359	2.8	.308	3.2	.269	3.7	.193	5.2	.130	7.7	.313	3.2

	Bacon.		Ham.		Lard.		Hens.		Eggs.		Butter.	
	Per lb.	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per dz.*	*Dozs.*	*Per lb.*	*Lbs.*
1913	$0.270	3.7	$0.269	3.7	$0.158	6.3	$0.213	4.7	$0.345	2.9	$0.383	2.6
1914	.275	3.6	.273	3.7	.156	6.4	.218	4.6	.353	2.8	.362	2.8
1915	.269	3.7	.261	3.8	.148	6.8	.208	4.8	.341	2.9	.358	2.8
1916	.287	3.5	.294	3.4	.175	5.7	.236	4.2	.375	2.7	.394	2.5
1917	.410	2.4	.382	2.6	.276	3.6	.286	3.5	.481	2.1	.487	2.1
1918	.529	1.9	.479	2.1	.333	3.0	.377	2.7	.569	1.8	.577	1.7
1919	.554	1.8	.534	1.9	.369	2.7	.411	2.4	.628	1.6	.678	1.5
1920	.523	1.9	.555	1.8	.295	3.4	.447	2.2	.681	1.5	.701	1.4
1921	.427	2.3	.488	2.0	.180	5.6	.397	2.5	.509	2.0	.517	1.9
1922: March	.390	2.6	.497	2.0	.173	5.8	.378	2.6	.318	3.1	.458	2.2

	Cheese.		Milk.		Bread.		Flour.		Corn meal.		Rice.	
	Per lb.	*Lbs.*	*Per qt.*	*Qts.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*
1913	$0.221	4.5	$0.089	11.2	$0.056	17.9	$0.033	30.3	$0.030	33.3	$0.087	11.5
1914	.229	4.4	.089	11.2	.063	15.9	.034	29.4	.032	31.3	.088	11.4
1915	.233	4.3	.088	11.4	.070	14.3	.042	23.8	.033	30.3	.091	11.0
1916	.258	3.9	.091	11.0	.073	13.7	.044	22.7	.034	29.4	.091	11.0
1917	.332	3.0	.112	9.0	.092	10.9	.070	14.3	.058	17.2	.104	9.6
1918	.359	2.8	.139	7.2	.098	10.2	.067	14.9	.068	14.7	.129	7.8
1919	.426	2.3	.155	6.5	.100	10.0	.072	13.9	.064	15.6	.151	6.6
1920	.416	2.4	.167	6.0	.115	8.7	.081	12.3	.065	15.4	.174	5.7
1921	.340	2.9	.146	6.8	.099	10.1	.058	17.2	.045	22.2	.095	10.5
1922: March	.330	3.0	.130	7.7	.087	11.5	.053	18.9	.039	25.6	.093	10.8

	Potatoes.		Sugar.		Coffee.		Tea.	
	Per lb.	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*
1913	$0.017	58.8	$0.055	18.2	$0.298	3.4	$0.544	1.8
1914	.018	55.6	.059	16.9	.297	3.4	.546	1.8
1915	.015	66.7	.066	15.2	.300	3.3	.545	1.8
1916	.027	37.0	.080	12.5	.299	3.3	.546	1.8
1917	.043	23.3	.093	10.8	.302	3.3	.582	1.7
1918	.032	31.3	.097	10.3	.305	3.3	.648	1.5
1919	.038	26.3	.113	8.8	.433	2.3	.701	1.4
1920	.063	15.9	.194	5.2	.470	2.1	.733	1.4
1921	.031	32.3	.080	12.5	.363	2.8	.697	1.4
1922: March	.031	32.3	.065	15.4	.356	2.8	.675	1.5

ES BY

All articles combined.
82
84
89
93
92
98
100
102
101
114
146
168
186
203
153
172
158
156
152
145
144
148
155
153
153
152
150
142
142
139

Index Numbers of Retail Prices of Food in the United States.

IN TABLE 4 index numbers are given which show the changes in the retail prices of each of 22 food articles,[4] by years from 1907 to 1921, and by months for 1921 and for January, February, and March, 1922.[5] These index numbers, or relative prices, are based on the year 1913 as 100, and are computed by dividing the average price of each commodity for each month and each year by the average price of that commodity for 1913. These figures must be used with caution. For example, the relative price of rib roast for the year 1920 was 168, which means that the average money price for the year 1920 was 68 per cent higher than the average money price for the year 1913. The relative price of bacon for the year 1919 was 205 and for the year 1920, 194, which figures show a drop of 11 points but a decrease of only 5 per cent in the year.

In the last column of Table 4 are given index numbers showing the changes in the retail cost of all articles of food combined. From January, 1913, to December, 1920, 22 articles have been included in the index, and beginning with January, 1921, 43 articles have been used.[4] For an explanation of the method used in making the link between the cost of the market basket of 22 articles, weighted according to the average family consumption in 1901, and the cost of the market basket based on 43 articles and weighted according to the consumption in 1918, see MONTHLY LABOR REVIEW for March, 1921 (p. 25).

The curve shown in the chart on page 31 pictures more readily to the eye the changes in the cost of the family market basket and the trend in the cost of the food budget than do the index numbers given in the table. The retail cost of the food articles included in the index has decreased since July, 1920, until the curve is brought down in March, 1922, to approximately where it was in March, 1917. The chart has been drawn on the logarithmic scale,[6] because the percentages of increase or decrease are more accurately shown than on the arithmetic scale.

[4] See note 2, p. 25.
[5] For index numbers of each month, January, 1913, to December, 1920, see MONTHLY LABOR REVIEW for February, 1921, pp. 19–21.
[6] For a discussion of the logarithmic chart, see article on "Comparison of arithmetic and ratio charts," by Lucian W. Chaney, MONTHLY LABOR REVIEW for March, 1919, pp. 20–34. Also, "The 'ratio' charts," by Prof. Irving Fisher, reprinted from Quarterly Publications of the American Statistical Association, June, 1917, 24 pp.

TABLE 4.—INDEX NUMBERS SHOWING CHANGES IN THE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES BY YEARS, 1907 TO 1921, AND BY MONTHS FOR 1921 AND 1922.

[Average for year 1913=100.]

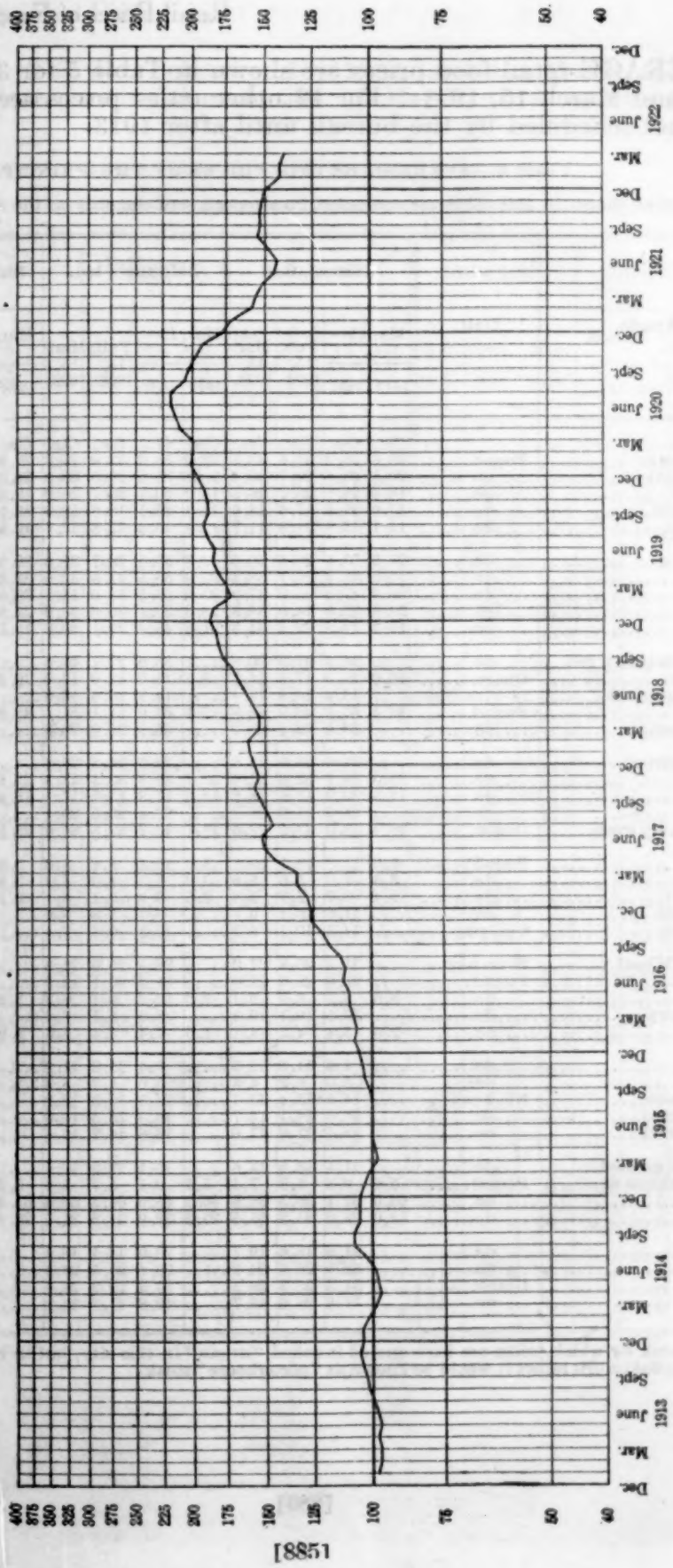
Year and month.	Sirloin steak.	Round steak.	Rib roast.	Chuck roast.	Plate beef.	Pork chops.	Bacon.	Ham.	Lard.	Hens.	Eggs.	Butter.	Cheese.	Milk.	Bread.	Flour.	Cornmeal.	Rice.	Potatoes.	Sugar.	Coffee.	Tea.	All articles combined.
1907	71	68	76	.....	.....	74	74	76	81	81	84	85	.....	87	.....	95	88	.....	105	105	.....	.....	82
1908	73	71	78	.....	.....	76	77	78	80	83	86	86	.....	90	.....	102	92	.....	111	108	.....	.....	84
1909	77	74	81	.....	.....	83	83	82	90	89	93	90	.....	91	.....	109	94	.....	112	107	.....	.....	89
1910	80	78	85	.....	.....	92	95	91	104	94	98	94	.....	95	.....	108	95	.....	101	109	.....	.....	93
1911	81	79	85	.....	.....	85	91	89	88	91	94	88	.....	96	.....	102	94	.....	130	117	.....	.....	92
1912	91	89	94	.....	.....	91	91	91	94	93	99	98	.....	97	.....	105	102	.....	135	115	.....	.....	98
1913	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1914	102	106	103	104	104	105	102	102	99	102	102	94	104	100	113	104	105	101	108	108	100	100	102
1915	101	103	101	101	100	96	100	97	93	97	99	93	105	99	125	126	108	104	89	120	101	100	101
1916	108	110	107	107	106	108	106	109	111	111	109	103	117	102	130	135	113	105	159	146	100	100	114
1917	124	130	126	131	130	152	152	142	175	134	139	127	150	125	164	211	192	119	253	169	101	107	146
1918	153	165	155	166	170	186	196	178	211	177	165	151	162	156	175	203	227	148	188	176	102	119	168
1919	164	174	164	169	167	201	205	199	234	193	182	177	193	174	179	218	213	174	224	205	145	129	186
1920	172	177	168	164	151	201	194	206	187	210	197	183	188	188	205	245	217	200	371	353	158	135	203
1921: Av. for year	**153**	**154**	**147**	**133**	**118**	**166**	**158**	**181**	**114**	**186**	**148**	**135**	**154**	**164**	**177**	**176**	**150**	**109**	**182**	**145**	**122**	**128**	**153**
January	159	163	157	148	140	171	171	180	141	200	229	159	175	183	193	203	173	176	176	176	129	133	172
February	151	153	148	138	129	156	166	179	131	201	139	148	174	173	189	197	167	121	153	162	126	131	158
March	154	157	152	141	130	168	155	181	124	203	121	150	176	171	188	194	160	113	147	176	125	131	156
April	157	160	154	140	127	177	164	183	116	202	99	145	169	167	184	179	153	106	135	176	123	129	152
May	158	160	153	138	124	167	161	181	106	194	97	111	143	162	177	173	150	101	129	153	121	129	145
June	157	160	151	135	117	162	159	182	103	181	101	105	133	160	175	179	150	101	159	142	120	126	144
July	158	161	148	129	109	163	160	190	106	182	122	122	133	157	173	176	147	100	200	129	120	127	148
August	157	160	147	130	112	181	162	197	115	183	138	134	148	161	173	173	150	101	247	136	119	127	155
September	153	154	144	128	110	179	159	191	113	179	146	132	148	158	171	170	147	103	235	133	119	127	153
October	147	148	139	124	109	171	153	180	109	175	171	139	149	160	170	164	143	107	206	125	119	127	153
November	141	139	135	120	106	152	147	170	105	168	201	139	151	161	166	155	140	108	188	122	119	127	152
December	139	138	135	120	106	145	143	165	101	168	204	136	149	158	163	152	137	107	182	118	119	124	150
1922:																							
January	139	136	135	119	106	137	139	164	97	173	145	118	149	153	157	148	130	107	194	113	120	125	142
February	139	135	134	118	106	140	140	173	101	173	140	120	149	148	154	155	130	107	194	116	119	125	142
March	141	138	136	121	107	149	144	185	109	177	92	120	149	146	155	161	130	107	182	118	119	124	139

AVERAGE retail food prices are shown in Table 5 for 30 ci

...OF ALL ARTICLES OF FOOD COMBINED, FOR THE UNITED STATES, BY MONTHS, JANUARY, 1913, TO MARCH, 1922.

TREND IN RETAIL COST OF ALL ARTICLES OF FOOD, COMBINED, FOR THE UNITED STATES, BY MONTHS, JANUARY, 1913, TO MARCH, 1922.

Average cost for 1913=100.



in 51 Cities on Certain Specified Dates.

Retail Prices of Food in 51 Cities

AVERAGE retail food prices are shown in Table 5 for 39 cities for and March 15, 1921. For 12 other cities prices are shown for were not scheduled by the bureau until after 1913.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

[The prices shown in this table are computed from reports sent monthly to the Bureau by retail

Article.	Unit.	Atlanta, Ga.				Baltimore, Md.				Birmingham, Ala.			
		Mar 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.
		1913	1921			1913	1921			1913	1921		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	22.6	36.2	32.6	33.3	22.0	38.2	32.9	33.3	24.9	40.4	32.0	32.5
Round steak	do	20.5	33.5	29.7	30.4	2.07	35.5	29.6	29.8	21.3	36.7	28.6	29.0
Rib roast	do	18.4	28.6	25.7	26.5	18.0	30.7	26.7	26.9	19.3	30.2	23.3	24.8
Chuck roast	do	13.0	21.9	17.6	18.6	15.3	23.1	18.8	18.9	16.1	24.8	17.8	19.2
Plate beef	do	11.1	13.9	11.6	11.7	12.4	16.4	12.8	12.4	10.5	15.3	11.5	11.8
Pork chops	do	21.5	33.6	28.9	30.0	19.3	33.6	28.7	29.9	20.0	34.4	28.0	29.5
Bacon	do	31.0	46.4	36.7	38.4	22.0	38.5	31.6	32.5	31.3	50.2	38.9	40.3
Ham	do	29.0	47.8	45.0	47.9	30.0	52.5	52.0	54.1	30.0	49.6	45.9	47.8
Lamb	do	20.6	32.9	34.0	38.3	18.3	33.1	35.8	38.9	21.3	39.0	35.8	39.5
Hens	do	19.3	34.8	32.4	34.3	21.8	45.4	39.1	40.8	18.7	37.7	31.9	33.8
Salmon (canned), red	do	.....	38.2	31.3	30.8	.....	35.0	27.7	26.8	.....	40.4	32.6	32.4
Milk, fresh	Quart	10.0	20.0	17.5	16.7	8.8	14.0	12.0	12.0	10.3	22.5	20.0	20.0
Milk, evaporated	15-16 oz. can	.....	15.4	14.3	13.4	.....	14.3	10.6	10.6	.....	15.8	12.7	12.2
Butter	Pound	42.4	65.8	48.2	48.8	42.1	63.0	51.1	51.1	45.0	65.1	48.0	48.6
Oleomargarine	do	.....	39.4	32.4	28.9	.....	35.1	26.9	26.3	.....	39.9	33.5	32.8
Nut margarine	do	.....	34.4	28.0	25.8	.....	30.6	26.8	25.8	.....	36.9	29.5	29.6
Cheese	do	25.0	38.7	32.6	33.0	23.3	39.7	33.3	33.3	21.8	39.3	31.2	31.4
Lard	do	14.8	20.9	17.4	18.2	14.0	17.8	15.7	17.1	15.4	19.6	16.0	17.2
Crisco	do	.....	24.2	21.9	21.2	.....	22.4	20.0	20.1	.....	28.0	20.7	21.1
Eggs, strictly fresh	Dozen	20.9	38.0	43.2	27.6	21.7	40.7	52.5	31.6	25.5	40.1	41.9	28.8
Bread	Pound	6.0	11.9	10.1	10.1	5.4	10.4	8.6	8.6	5.0	10.7	9.1	9.1
Flour	do	3.6	7.0	5.6	5.8	3.2	6.3	4.9	5.2	3.8	7.5	5.8	5.9
Corn meal	do	2.4	3.7	2.7	2.8	2.5	3.9	3.1	3.1	2.1	3.7	2.8	2.7
Rolled oats	do	.....	11.6	10.1	9.7	.....	9.7	8.8	8.9	.....	11.8	9.8	9.5
Corn flakes	8-oz. pkg	.....	14.3	10.1	9.7	.....	12.3	9.5	9.4	.....	14.6	10.4	9.9
Cream of Wheat	28-oz. pkg	.....	31.8	26.8	27.0	.....	28.5	25.0	24.8	.....	32.4	27.8	27.7
Macaroni	Pound	.....	22.0	22.0	21.9	.....	21.2	20.1	19.3	.....	23.6	19.0	18.3
Rice	do	8.6	8.3	8.9	9.1	9.0	10.2	9.1	9.2	8.2	9.8	9.1	8.9
Beans, navy	do	.....	10.5	10.1	10.4	.....	8.2	8.1	8.4	.....	10.0	9.6	9.7
Potatoes	do	2.0	3.4	4.2	4.1	1.5	2.4	3.4	3.3	1.9	3.5	4.3	4.1
Onions	do	.....	4.9	11.3	12.3	.....	3.4	11.2	11.8	.....	5.2	11.1	12.0
Cabbage	do	.....	5.0	6.2	4.8	.....	5.6	5.2	5.3	.....	5.3	5.7	4.9
Beans, baked	No. 2 can	.....	14.5	13.4	13.1	.....	13.7	12.3	12.2	.....	17.0	14.9	15.0
Corn, canned	do	.....	16.6	16.1	15.7	.....	16.3	15.5	15.0	.....	17.5	16.6	16.5
Peas, canned	do	.....	18.1	17.0	17.0	.....	16.6	16.7	16.4	.....	21.5	19.9	20.2
Tomatoes, canned	do	.....	11.5	13.5	13.6	.....	10.1	12.2	12.1	.....	10.6	13.0	13.2
Sugar, granulated	Pound	5.6	9.8	6.9	7.1	5.1	9.1	5.7	5.6	5.2	10.5	6.4	6.5
Tea	do	60.0	92.7	86.3	86.6	56.0	68.0	66.3	66.6	61.3	88.9	80.1	80.1
Coffee	do	32.0	35.0	35.8	35.5	25.2	32.9	31.3	31.5	28.8	40.0	36.0	36.3
Prunes	do	.....	21.9	18.6	19.7	.....	20.0	18.1	18.3	.....	25.9	20.7	20.8
Raisins	do	.....	32.5	25.6	24.9	.....	29.6	23.5	23.4	.....	33.9	25.4	25.2
Bananas	Dozen	.....	31.3	25.7	26.3	.....	33.2	29.2	28.6	.....	43.5	33.8	34.3
Oranges	do	.....	37.8	38.6	49.7	.....	42.8	47.3	53.1	.....	41.0	43.2	48.5

[1] The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

on Certain Specified Dates.

March 15, 1913, for February 15, 1922, and for March 15, 1922, the same dates, with the exception of March, 1913, as these cities

OF FOOD FOR 51, CITIES ON CERTAIN SPECIFIED DATES.

dealers. As some dealers occasionally fail to report the number of quotations varies from month to months.

Boston, Mass.				Bridgeport, Conn.			Buffalo, N. Y.				Butte, Mont.			Charleston, S. C.			
Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15, 1921.	Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15, 1921.	Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.
1913	1921						1913	1921						1913	1921		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Ct.*	*Cts.*	*Cts.*
[1]34.6	[1]58.0	[1]55.5	[1]56.1	43.4	38.9	40.0	22.0	34.9	32.6	32.9	31.6	29.1	29.3	21.0	39.1	34.3	35.0
33.0	51.5	45.7	46.5	40.4	34.4	34.2	19.0	31.1	26.7	26.8	27.8	25.6	25.5	20.0	38.1	31.8	33.4
23.4	37.1	33.6	33.7	33.6	30.5	31.1	17.3	27.8	25.4	25.7	25.4	24.2	24.9	19.3	33.1	27.9	28.9
17.7	26.1	22.8	23.0	24.9	20.8	20.9	15.3	21.5	18.2	18.6	19.0	17.2	17.0	15.0	25.9	20.9	21.5
.....	17.6	15.2	14.8	11.6	9.7	9.4	11.5	13.9	11.9	12.2	13.1	12.3	12.3	11.4	19.2	15.5	15.7
22.2	38.6	31.5	33.5	35.1	28.9	31.6	19.3	34.9	30.6	33.3	36.4	28.2	31.1	23.0	39.3	31.8	33.8
25.4	41.0	35.4	35.8	48.8	40.9	42.9	21.0	35.3	31.0	32.3	54.0	48.3	50.0	24.3	44.3	34.0	35.0
28.8	53.8	52.8	57.1	55.5	55.8	60.2	25.0	46.6	47.4	50.2	53.3	52.9	57.1	26.7	47.6	45.0	48.1
21.8	36.4	38.5	41.2	32.7	36.1	37.6	17.3	26.8	30.6	34.0	31.3	28.0	29.3	21.3	41.3	39.5	45.9
24.2	47.3	40.1	40.6	46.1	40.1	39.8	21.7	43.1	36.9	37.8	41.8	35.4	35.9	21.8	44.3	38.9	39.5
.....	37.9	32.6	31.2	40.5	32.9	33.0	.....	35.9	28.7	28.0	43.1	37.1	37.1	.....	34.3	27.6	27.9
8.9	16.0	13.5	13.5	15.0	12.0	12.0	8.0	14.5	15.0	14.3	15.8	14.0	14.0	11.7	23.3	18.7	18.7
.....	15.2	12.4	12.0	14.7	12.1	11.8	.....	14.0	10.6	10.3	15.2	12.1	12.1	.....	13.6	11.5	11.1
41.4	57.0	45.7	45.8	55.6	45.8	44.8	40.6	57.0	45.9	45.6	58.0	44.3	44.3	40.4	56.7	43.6	44.5
.....	38.7	32.1	30.7	33.6	24.7	25.8	.....	33.3	27.3	27.1	37.5	27.5	27.5	.....	32.3	28.6	28.5
.....	32.7	28.5	26.8	31.0	24.3	24.3	.....	30.5	26.6	26.5	34.7	30.7	29.1	.....	31.8	28.0	30.0
22.4	38.8	33.8	34.1	39.2	32.9	33.0	21.5	36.9	31.9	32.0	40.6	35.6	35.6	21.0	36.9	30.1	30.8
15.7	19.8	16.2	17.6	17.9	14.9	16.3	14.1	17.6	14.9	16.5	26.5	20.3	21.1	15.0	20.7	16.8	18.5
.....	24.2	22.4	22.4	23.6	20.8	21.0	.....	22.7	20.1	20.0	31.1	24.9	24.7	.....	22.7	21.0	21.5
32.8	56.2	65.2	43.7	54.6	59.5	41.4	24.7	44.5	53.4	31.3	44.6	54.2	39.6	26.3	38.6	48.3	29.4
5.9	10.5	8.5	8.6	11.0	8.4	8.4	5.6	10.4	8.6	8.6	9.7	9.6	9.6	6.2	11.6	9.5	9.5
3.7	6.8	5.8	6.1	6.3	5.2	5.3	2.9	5.5	4.7	5.0	6.7	5.6	5.7	3.7	7.4	6.0	6.2
3.5	6.0	4.9	4.9	8.5	7.1	6.9	2.5	4.4	3.7	3.5	5.7	4.2	4.1	2.3	3.2	2.9	2.9
.....	9.5	8.5	8.5	10.2	9.0	8.5	.....	8.0	7.6	7.5	9.0	7.3	7.3	.....	11.3	9.5	9.5
.....	13.5	10.9	10.6	12.4	10.2	9.5	.....	11.9	9.7	9.4	14.5	12.1	12.1	.....	13.9	10.8	10.6
.....	29.5	26.1	26.2	28.6	25.3	25.1	.....	28.0	25.6	25.2	33.6	30.3	29.7	.....	30.4	25.3	24.9
.....	24.7	24.0	24.0	24.1	24.2	24.6	.....	22.2	22.5	22.3	22.5	22.8	22.8	.....	22.6	20.2	20.2
9.2	11.6	10.4	10.5	10.6	9.4	9.7	9.3	9.3	9.1	9.3	10.2	9.4	9.4	5.6	6.7	6.6	6.7
.....	8.1	8.1	8.7	9.6	8.9	9.4	.....	8.2	8.0	8.3	9.4	8.9	9.1	.....	10.4	9.5	9.6
1.6	2.2	3.2	2.9	2.2	3.3	3.0	1.4	1.7	2.7	2.5	1.4	1.8	1.7	2.0	2.7	3.9	3.7
.....	3.8	11.4	12.0	3.9	11.1	11.7	.....	3.7	11.4	12.0	3.8	10.4	12.0	.....	4.7	12.3	13.7
.....	5.7	7.0	6.3	4.9	6.5	6.9	.....	2.3	4.9	5.5	5.5	6.3	6.3	.....	3.8	5.4	4.3
.....	16.6	14.7	14.4	13.3	11.9	11.8	.....	12.6	11.2	11.2	21.0	19.4	19.4	.....	12.7	11.6	11.6
.....	19.6	19.3	18.7	19.9	18.5	18.5	.....	15.5	15.2	14.7	17.8	18.0	17.7	.....	16.4	14.7	14.7
.....	20.8	21.6	21.2	20.2	20.1	19.9	.....	15.9	17.1	16.8	18.7	17.2	17.2	.....	19.1	19.1	19.4
.....	13.6	13.4	13.3	12.1	12.9	13.0	.....	11.6	13.1	13.1	13.4	16.6	15.9	.....	10.6	11.8	12.1
5.3	9.5	6.0	6.3	9.5	6.0	6.1	5.3	9.5	6.0	6.2	11.6	8.4	8.4	5.0	9.1	6.0	6.0
58.6	65.8	68.1	67.5	59.6	57.0	57.0	45.0	63.9	56.9	58.2	77.0	78.3	78.3	50.0	75.9	74.6	74.6
33.0	41.4	41.6	41.0	35.1	34.6	34.1	29.3	34.7	33.3	34.1	50.7	45.8	45.1	26.0	33.3	31.5	31.5
.....	20.1	19.7	19.8	19.5	18.9	19.6	.....	20.4	18.7	18.3	22.1	19.5	19.8	.....	22.0	18.9	19.2
.....	32.2	23.0	23.1	31.3	25.0	25.0	.....	31.0	22 1	21.9	32.1	27.9	27.5	.....	32.9	24.9	24.9
.....	50.7	45.6	44.9	41.3	35.0	35.9	.....	49.3	44.4	44.4	[2]18.0	[2]15.3	[2]14.7	.....	45.0	36.5	34.6
.....	45.7	50.8	59.2	46.2	50.8	57.0	.....	51.6	54.7	60.1	39.1	51.2	52.5	.....	36.3	37.3	46.8

[2] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Chicago, Ill.				Cincinnati, Ohio.				Cleveland, Ohio.			
		Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.
		1913	1921			1913	1921			1913	1921		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	22.0	38.6	34.3	34.5	22.4	33.4	30.7	31.6	23.7	36.9	30.2	31.2
Round steak	do	18.9	30.7	27.2	27.2	19.9	31.3	27.0	28.4	21.0	31.9	24.9	25.8
Rib roast	do	19.4	31.5	28.1	27.7	19.0	29.7	26.1	26.6	19.2	27.6	22.6	23.4
Chuck roast	do	15.3	21.9	18.2	18.5	14.9	20.3	16.5	17.2	16.2	22.6	17.6	18.1
Plate beef	do	11.2	14.7	11.5	11.4	12.1	17.2	13.7	13.9	11.8	15.6	11.3	11.5
Pork chops	do	17.9	35.2	26.9	27.7	20.6	34.4	28.2	30.5	19.8	35.5	27.4	30.7
Bacon	do	29.8	51.6	44.5	45.2	25.0	38.4	31.0	30.8	25.6	46.1	35.8	37.0
Ham	do	31.3	51.8	47.4	49.7	26.8	49.9	47.4	51.5	33.5	54.7	44.9	49.3
Lamb	do	19.7	33.7	35.8	36.7	17.4	33.4	33.8	36.1	20.3	32.6	33.6	36.6
Hens	do	19.9	40.8	35.5	36.5	23.3	47.4	37.5	39.2	22.7	44.4	36.9	39.3
Salmon (canned), red	do	.....	37.7	33.3	33.3	.....	36.0	29.1	28.2	.....	38.7	31.8	31.2
Milk, fresh	Quart	8.0	14.0	12.0	12.0	8.0	14.0	12.0	12.0	8.8	14.0	11.0	11.0
Milk, evaporated	15–16 oz. can	.....	14.0	10.7	10.3	.....	14.3	10.4	10.4	.....	14.9	10.6	10.2
Butter	Pound	40.4	53.8	42.8	43.5	42.9	57.3	43.5	44.9	43.4	58.0	48.8	48.8
Oleomargarine	do	.....	28.7	24.1	23.6	.....	32.1	28.2	27.9	.....	32.9	28.3	28.1
Nut margarine	do	.....	26.5	23.7	23.1	.....	29.3	27.1	27.7	.....	29.4	26.6	25.5
Cheese	do	25.0	39.2	35.0	34.3	21.6	40.0	34.3	33.9	23.0	37.3	32.5	32.3
Lard	do	14.6	18.8	15.2	16.2	14.0	16.4	14.0	15.6	16.1	20.3	16.2	17.7
Crisco	do	.....	24.7	21.9	21.6	.....	23.4	20.7	21.0	.....	25.7	21.5	21.6
Eggs, strictly fresh	Dozen	23.4	40.2	48.4	31.5	20.5	39.1	41.9	27.2	27.2	40.9	50.3	32.1
Bread	Pound	6.1	11.3	8.9	9.7	4.8	10.0	8.5	8.5	5.5	8.8	8.0	7.9
Flour	do	2.7	5.6	4.7	4.9	3.4	6.3	5.0	5.2	3.2	6.5	5.1	5.3
Corn meal	do	2.9	6.0	5.1	4.9	2.5	3.8	2.8	2.8	2.7	5.0	3.5	3.3
Rolled oats	do	.....	9.8	8.2	8.1	.....	10.5	8.5	8.5	.....	10.3	8.3	7.9
Corn flakes	8-oz pkg	.....	12.5	10.0	9.8	.....	12.2	9.9	9.7	.....	14.0	10.7	10.6
Cream of wheat	28-oz. pkg	.....	28.3	25.5	25.0	.....	29.6	25.3	24.9	.....	29.8	25.3	25.6
Macaroni	Pound	.....	19.5	18.5	18.2	.....	19.3	18.0	17.3	.....	22.1	19.6	19.9
Rice	do	9.0	9.0	9.8	9.9	8.8	10.1	8.8	8.6	8.5	9.6	8.9	8.9
Beans, navy	do	.....	7.5	8.0	8.6	.....	6.8	7.1	7.7	.....	7.2	7.4	7.9
Potatoes	do	1.3	2.1	3.0	3.0	1.4	2.8	3.4	3.3	1.4	2.3	3.3	3.2
Onions	do	.....	3.2	9.6	10.0	.....	3.5	10.8	10.8	.....	3.2	10.6	11.5
Cabbage	do	.....	5.0	6.0	5.0	.....	4.5	5.3	5.1	.....	3.1	6.0	5.8
Beans, baked	No. 2 can	.....	15.1	12.5	12.2	.....	13.7	11.0	10.9	.....	14.1	12.0	12.0
Corn, canned	do	.....	15.4	14.6	14.5	.....	15.8	15.6	15.2	.....	18.0	16.5	16.7
Peas, canned	do	.....	15.2	15.6	15.5	.....	17.0	17.2	17.2	.....	18.6	17.7	17.9
Tomatoes, canned	do	.....	11.8	13.7	14.0	.....	10.8	12.9	13.4	.....	12.9	13.6	13.5
Sugar, granulated	Pound	4.9	9.1	5.9	5.9	5.1	9.7	6.3	6.4	5.5	10.1	6.4	6.5
Tea	do	53.3	65.7	64.4	63.4	60.0	71.4	71.9	70.8	50.0	71.0	63.7	64.0
Coffee	do	30.0	33.8	34.4	34.3	25.6	31.9	30.7	30.4	26.5	39.6	35.7	35.8
Prunes	do	.....	21.6	19.4	20.4	.....	24.3	19.2	18.9	.....	18.8	17.3	17.7
Raisins	do	.....	31.5	25.5	25.4	.....	32.3	22.4	22.6	.....	30.3	23.1	23.0
Bananas	Dozen	.....	40.9	35.7	35.4	.....	42.9	37.5	38.1	.....	53.0	45.8	45.0
Oranges	do	.....	41.5	49.7	56.2	.....	42.5	42.6	51.2	.....	45.3	48.5	55.8

[1] The steak for which prices are here quoted is called "rump" in this city, but in most of the other cities included in this report it would be known as "sirloin" steak.

OF FOOD FOR 51; CITIES ON CERTAIN SPECIFIED DATES—Continued.

Columbus, Ohio.			Dallas, Tex.				Denver, Colo.				Detroit, Mich.				Fall River, Mass.			
Mar. 15, 1921.	Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.
			1913	1921			1913	1921			1913	1921			1913	1921		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
35.8	31.3	31.9	21.8	37.9	33.0	33.6	22.7	31.2	28.5	29.6	24.0	36.0	32.5	32.5	[1] 32.0	[1] 52.9	[1] 51.6	[1] 52.2
31.7	26.2	27.5	20.3	35.7	29.5	30.4	19.6	26.8	23.4	24.6	19.4	30.2	25.2	25.5	25.0	42.1	39.5	40.0
28.5	24.8	25.2	18.8	31.1	25.6	26.4	16.6	23.9	22.1	22.2	19.8	28.3	24.7	25.3	22.0	29.2	26.4	25.8
23.2	18.4	19.4	15.6	25.7	19.7	20.0	14.6	18.2	15.9	16.6	15.4	21.2	17.7	17.8	17.0	23.0	19.5	19.5
15.6	12.5	13.4	12.5	20.3	15.8	16.2	9.4	11.6	9.8	10.2	11.0	14.1	11.1	11.3	.....	14.2	12.2	12.3
31.0	25.5	28.3	21.2	35.0	32.5	33.6	17.6	32.6	26.5	28.7	18.6	34.4	29.5	31.1	19.5	32.4	27.3	29.7
41.1	33.5	35.6	37.0	50.7	42.6	46.5	27.0	49.1	41.7	42.1	23.0	42.7	37.4	38.9	25.0	42.6	37.4	36.7
47.2	45.5	49.3	31.3	52.1	54.2	55.0	28.3	53.2	52.5	55.0	25.5	52.9	53.5	56.9	29.7	50.4	46.8	50.9
38.0	34.0	36.1	22.0	41.7	37.5	39.2	16.9	30.3	31.4	33.4	17.2	32.3	36.9	37.2	19.3	36.9	36.9	38.5
41.6	35.0	35.3	19.6	35.0	31.1	31.1	20.7	37.9	30.3	32.9	21.6	43.4	36.7	38.3	24.5	49.5	43.8	42.6
38.7	32.9	32.4	.....	38.9	32.5	32.1	.....	40.5	36.5	36.6	.....	38.4	31.2	30.7	.....	38.8	32.7	31.5
14.0	11.0	11.0	10.0	15.5	12.0	12.0	8.4	12.8	9.8	9.8	8.0	13.0	13.0	12.3	9.0	15.0	14.0	14.0
14.9	11.0	10.4	.....	15.5	13.8	13.5	.....	13.3	11.5	10.9	.....	14.6	10.9	10.8	.....	16.0	13.4	12.8
57.0	44.6	44.4	39.0	57.4	45.2	46.4	39.0	52.3	37.2	39.8	40.6	58.0	44.4	45.6	39.9	54.4	44.4	44.3
31.2	25.3	24.8	.....	29.5	27.8	27.8	.....	38.1	28.7	28.4	.....	33.7	26.6	25.7	.....	35.7	28.7	28.7
28.1	25.0	24.3	.....	33.8	30.3	29.8	.....	30.9	28.2	28.2	.....	30.1	25.9	25.2	.....	34.7	30.0	30.0
38.1	30.4	30.3	20.0	38.5	33.8	33.4	26.1	40.6	35.4	35.6	21.3	37.0	31.3	31.9	24.0	39.4	33.8	34.4
16.6	13.7	15.4	17.0	22.9	19.0	20.3	16.3	22.0	17.7	19.0	16.2	18.5	15.7	16.4	15.0	18.7	15.2	16.4
24.4	21.8	21.4	.....	23.6	20.4	20.7	.....	24.9	23.6	24.1	.....	22.9	20.5	21.1	.....	27.3	21.8	21.8
33.5	39.7	27.1	24.0	33.5	44.6	24.8	26.1	37.7	43.5	29.3	25.2	40.6	50.7	31.1	32.9	58.6	66.4	52.1
10.5	10.5	7.9	5.6	10.2	9.1	9.1	5.3	10.8	8.2	8.2	5.6	11.0	8.6	8.6	6.2	10.9	9.7	9.6
6.5	4.8	4.9	3.3	6.6	4.8	5.0	2.6	5.0	4.0	4.2	3.1	6.1	4.8	5.0	3.2	6.5	5.1	5.3
4.1	3.1	3.2	2.6	4.4	3.3	3.4	2.4	3.8	2.9	3.0	2.7	5.2	4.0	4.3	3.4	8.0	6.4	6.0
10.9	8.8	8.8	.....	11.7	10.5	10.5	.....	10.0	9.3	9.4	.....	10.6	9.7	9.3	.....	11.0	10.2	9.8
12.6	9.5	9.5	.....	14.1	11.1	11.6	.....	13.7	10.6	10.5	.....	12.4	9.7	9.6	.....	14.6	11.8	10.7
30.1	25.9	25.4	.....	31.4	26.6	26.3	.....	29.6	25.8	25.4	.....	29.8	25.8	25.5	.....	29.6	27.2	27.7
20.5	19.7	19.2	.....	21.8	21.3	20.7	.....	20.4	21.0	21.6	.....	19.7	19.2	19.1	.....	24.3	23.7	23.6
10.3	10.4	10.7	9.3	9.7	11.0	10.7	8.6	9.2	9.3	9.2	8.4	9.6	9.1	9.1	10.0	11.3	9.6	10.0
7.1	7.7	8.5	.....	9.2	9.6	10.0	.....	9.4	9.1	9.3	.....	6.7	7.2	8.1	.....	8.3	8.2	8.5
2.3	3.2	3.0	1.8	3.7	4.4	4.0	1.0	2.2	2.7	2.6	1.2	1.7	2.6	2.4	1.7	2.3	3.4	3.1
4.1	11.9	12.0	.....	5.2	11.0	11.7	.....	3.2	11.5	12.3	.....	3.0	10.3	11.1	.....	4.2	11.8	12.0
3.9	6.3	6.4	.....	4.9	5.8	4.8	.....	2.5	5.2	4.9	.....	3.8	6.3	6.4	.....	6.3	7.8	7.3
14.6	13.1	13.1	.....	17.6	15.9	16.1	.....	16.5	14.9	14.7	.....	13.5	11.7	11.7	.....	15.3	13.7	13.3
13.5	13.1	12.9	.....	19.6	16.9	16.6	.....	16.2	15.0	14.9	.....	17.5	14.8	15.2	.....	17.9	16.6	15.8
15.4	15.9	15.5	.....	21.7	21.8	22.1	.....	17.8	17.7	17.3	.....	18.2	16.5	16.5	.....	18.9	18.2	17.9
11.2	13.8	14.3	.....	12.5	14.3	14.3	.....	12.9	13.4	13.2	.....	11.4	12.2	13.0	.....	12.4	13.6	13.5
10.0	6.5	6.7	5.7	10.1	6.6	6.9	5.4	10.0	7.1	7.2	5.0	9.5	6.1	6.1	5.2	9.6	6.5	6.4
85.6	77.4	75.2	66.7	89.2	88.9	88.9	52.8	71.6	69.8	70.0	43.3	65.2	60.4	60.7	44.2	58.2	53.9	54.3
36.9	35.1	34.1	36.7	42.1	40.4	40.8	29.4	37.7	34.9	35.1	29.3	36.2	35.3	35.3	33.0	41.2	39.1	38.5
20.2	19.5	19.1	.....	24.1	21.6	22.3	.....	21.5	19.9	20.1	.....	21.4	18.8	19.1	.....	19.0	18.5	18.1
32.0	24.4	23.7	.....	33.0	26.1	26.6	.....	32.8	25.3	25.3	.....	30.0	23.4	23.1	.....	31.6	25.4	24.9
43.1	37.7	36.9	.....	38.6	34.4	33.3	.....	[2] 14.4	[2] 13.4	[2] 13.5	.....	35.9	32.1	33.3	.....	47.0	35.0	33.3
44.2	46.2	53.7	.....	49.9	57.3	56.2	.....	41.9	49.2	52.9	.....	48.2	47.9	55.8	.....	44.1	45.3	56.0

[2] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Houston, Tex.			Indianapolis, Ind.				Jacksonville, Fla.			
		Mar. 15, 1921.	Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.
					1913	1921			1913	1921		
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	34.6	30.4	31.8	24.8	35.7	32.6	32.5	25.8	36.1	33.1	34.8
Round steak	do	33.9	30.0	29.8	23.2	33.5	30.8	30.8	20.3	33.2	28.0	29.8
Rib roast	do	29.2	23.2	24.5	17.2	27.6	23.5	24.5	25.0	28.8	25.8	25.9
Chuck roast	do	25.2	20.4	21.3	15.5	23.2	20.2	20.2	15.8	21.8	17.0	17.4
Plate beef	do	19.8	15.7	17.1	12.3	16.7	14.1	13.9	10.3	13.5	9.9	10.2
Pork chops	do	33.9	29.6	30.0	20.0	31.6	28.1	31.1	23.0	36.1	29.5	31.3
Bacon	do	54.4	48.4	49.1	28.0	43.3	36.3	37.6	26.0	41.8	35.9	36.5
Ham	do	53.2	48.9	51.1	29.5	52.2	49.7	54.1	26.8	48.5	47.7	50.0
Lamb	do	36.8	35.0	37.5	18.7	35.0	37.9	39.3	20.8	32.5	38.3	37.5
Hens	do	36.4	31.0	33.4	21.8	42.5	34.6	33.7	22.0	41.3	35.4	37.4
Salmon (canned), red	do	38.1	32.2	32.2	.....	41.8	39.5	38.4	.....	39.0	32.0	31.2
Milk, fresh	Quart	18.2	16.5	16.0	8.0	13.0	11.0	10.7	12.5	22.7	17.7	17.7
Milk, evaporated	15–16 oz. can	15.1	12.3	11.8	.....	14.5	10.9	10.4	.....	14.8	12.7	12.1
Butter	Pound	53.7	42.9	47.3	42.3	57.5	44.4	44.5	43.8	63.8	47.9	47.9
Oleomargarine	do	36.5	29.6	30.3	.....	32.2	28.2	27.8	.....	35.4	27.7	27.8
Nut margarine	do	32.3	27.8	28.9	.....	30.3	27.5	26.8	.....	32.6	33.3	27.5
Cheese	do	37.2	31.1	31.5	20.5	39.6	33.6	33.3	22.5	38.1	31.6	31.5
Lard	do	21.7	16.8	18.8	15.2	16.8	13.9	15.1	15.3	21.0	16.1	17.3
Crisco	do	24.6	22.2	23.7	.....	22.8	21.0	21.1	.....	24.7	21.5	22.4
Eggs, strictly fresh	Dozen	31.6	40.2	24.0	20.0	34.4	39.3	24.0	30.0	40.3	48.0	30.4
Bread	Pound	9.0	7.0	7.0	5.1	9.8	8.6	8.1	6.5	11.3	10.4	10.4
Flour	do	7.0	5.1	5.4	3.3	6.4	4.8	4.9	3.8	7.2	6.1	6.2
Corn meal	do	4.1	3.5	3.4	2.6	3.5	2.8	2.8	2.6	3.4	3.0	3.0
Rolled oats	do	11.4	8.9	9.2	.....	10.3	7.9	8.0	.....	11.7	10.6	10.2
Corn flakes	8-oz. pkg	13.6	10.5	10.2	.....	13.0	9.8	9.9	.....	14.7	11.4	10.4
Cream of wheat	28-oz. pkg	30.0	25.2	25.0	.....	31.7	26.5	26.7	.....	30.0	27.4	27.4
Macaroni	Pound	21.2	20.3	20.5	.....	20.9	19.1	19.0	.....	21.8	19.6	19.4
Rice	do	7.5	7.8	7.9	9.2	9.9	9.6	10.1	6.6	8.1	9.1	9.3
Beans, navy	do	8.8	9.0	9.5	.....	7.1	7.8	9.2	.....	9.6	9.6	9.7
Potatoes	do	3.9	4.1	3.8	1.3	2.1	2.9	2.6	2.3	3.4	4.0	3.9
Onions	do	4.5	10.2	11.0	.....	3.4	11.0	11.6	.....	5.1	11.7	12.5
Cabbage	do	3.8	4.9	4.4	.....	3.8	5.7	5.1	.....	4.0	4.4	3.3
Beans, baked	No. 2 can	14.5	13.8	13.8	.....	14.6	13.4	12.9	.....	14.0	12.6	12.1
Corn, canned	do	14.1	13.9	13.7	.....	13.7	14.9	14.6	.....	17.5	17.5	17.5
Peas, canned	do	18.7	18.3	18.7	.....	14.6	15.7	15.5	.....	20.9	18.8	18.2
Tomatoes, canned	do	11.3	13.4	13.6	.....	12.1	14.3	14.5	.....	10.6	13.1	13.6
Sugar, granulated	Pound	9.6	6.1	6.2	5.8	10.0	6.6	6.7	5.9	9.8	6.7	6.8
Tea	do	71.4	71.9	71.6	60.0	81.8	75.7	74.2	60.0	89.1	89.8	84.8
Coffee	do	31.7	30.8	31.1	31.3	39.7	36.6	36.6	34.5	38.8	38.2	37.6
Prunes	do	19.3	19.3	20.6	.....	22.1	20.1	19.9	.....	20.9	18.6	18.3
Raisins	do	32.4	24.7	24.7	.....	34.8	26.8	26.2	.....	33.9	25.3	24.7
Bananas	Dozen	35.3	29.1	28.0	.....	32.0	30.0	30.0	.....	28.8	28.3	27.2
Oranges	do	44.9	47.7	53.5	.....	43.1	45.8	50.0	.....	29.6	34.0	41.1

[1] The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

Kansas City, Mo.				Little Rock, Ark.				Los Angeles, Calif.				Louisville, Ky.				Manchester, N. H.			
Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.
1913	1921			1913	1921			1913	1921			1913	1921			1913	1921		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
22.8	36.4	33.6	33.8	24.4	36.0	29.5	29.4	22.8	35.4	33.6	34.1	21.8	31.9	29.5	30.3	[1] 35.2	[1] 53.5	[1] 49.9	[1] 50.9
20.2	32.1	28.0	28.5	19.4	33.4	26.8	27.1	20.4	30.9	27.2	28.2	18.9	30.4	27.1	28.1	28.6	46.5	41.5	41.9
17.7	27.2	23.3	23.3	18.4	28.8	22.8	23.7	19.0	29.9	28.2	28.1	17.9	25.5	22.1	22.6	19.6	27.8	25.8	26.4
14.7	19.9	16.7	16.5	15.3	22.5	17.0	18.5	16.0	21.2	17.7	17.7	15.3	20.7	17.5	17.5	16.8	23.6	20.6	20.6
11.4	14.2	11.2	11.3	12.0	16.9	13.4	14.1	12.7	16.8	13.3	13.8	11.9	17.2	13.1	12.9	.....	18.4	15.4	14.3
19.2	33.4	25.7	29.3	20.0	34.1	28.9	30.3	24.4	40.1	37.7	37.6	19.6	33.5	25.1	27.8	19.2	35.2	26.5	31.2
28.4	50.6	42.6	44.0	34.0	50.9	40.3	42.1	33.8	52.4	50.1	50.5	27.8	38.4	31.8	32.5	22.6	38.4	31.9	32.2
27.9	50.0	50.9	53.2	28.8	52.3	48.1	51.5	34.2	59.3	58.5	60.6	27.9	46.2	42.4	45.2	27.8	44.6	43.4	45.1
17.3	31.4	31.5	32.5	20.8	38.1	35.9	38.6	19.2	34.4	31.2	32.1	18.1	35.0	36.3	36.7	18.6	32.9	35.3	37.2
17.4	38.7	31.6	32.9	17.9	36.6	29.0	30.8	26.5	51.0	44.6	43.8	23.1	40.4	34.6	35.5	23.2	49.4	44.3	42.9
.....	35.5	32.7	32.5	.....	41.1	33.2	33.2	....	46.5	44.1	42.7	....	32.2	30.0	30.0	.....	39.3	32.0	31.8
8.7	14.3	14.0	13.0	10.0	15.0	13.3	13.3	10.0	16.0	14.0	14.0	8.8	11.0	9.0	9.0	8.0	15.0	13.0	12.3
.....	15.0	12.0	11.9	....	15.9	12.6	12.1	....	12.8	10.3	10.1	....	14.9	12.1	11.4	.....	16.4	13.5	12.9
40.6	57.1	44.1	45.0	43.3	60.2	46.6	47.6	43.5	49.2	55.4	45.0	43.6	59.1	46.1	48.4	42.2	64.1	48.9	48.1
.....	32.0	28.4	28.3	....	33.3	31.0	30.6	....	35.4	31.3	30.3	....	31.7	27.8	27.0	.....	35.4	29.1	28.3
.....	29.9	28.2	27.9	....	31.7	29.6	29.4	....	30.8	28.7	27.7	....	30.6	27.3	27.1	.....	30.3	25.4	24.5
21.5	40.4	34.2	34.5	21.7	38.7	33.4	33.9	19.5	43.1	36.4	35.9	21.7	37.2	30.5	30.8	21.5	37.4	33.4	33.2
16.2	20.1	16.5	18.2	15.0	20.1	17.8	19.3	17.9	21.9	17.0	17.7	15.3	16.2	14.2	15.5	16.2	18.9	16.2	17.4
.....	26.8	23.7	24.1	....	23.1	21.7	22.4	....	22.2	21.7	22.1	....	25.0	22.8	23.2	.....	25.5	21.9	22.4
23.1	36.3	41.5	28.6	20.5	36.0	38.2	25.0	26.0	38.6	38.4	32.2	20.4	35.4	39.8	23.7	29.6	53.4	59.9	39.1
5.9	11.4	6.4	6.9	6.0	9.5	8.4	8.4	6.2	9.7	9.0	9.0	5.7	10.1	8.6	8.6	5.9	9.1	7.8	8.0
3.0	6.1	4.7	4.9	3.6	7.2	5.5	5.6	3.6	6.6	4.7	4.9	3.7	6.8	5.4	5.6	3.4	6.8	5.4	5.7
2.5	5.3	4.7	4.7	2.4	3.1	2.7	2.9	3.1	5.6	3.9	4.1	2.2	2.8	2.1	2.3	3.6	6.1	5.0	4.9
.....	10.8	8.3	8.3	....	11.9	10.2	10.9	....	10.5	9.7	9.8	....	10.8	8.5	8.1	.....	10.2	8.6	9.2
.....	13.9	10.1	10.1	....	14.0	10.0	10.0	....	13.2	10.4	10.2	....	12.8	9.8	9.6	.....	13.9	10.2	9.9
.....	30.4	26.9	26.8	....	31.1	26.8	27.3	....	29.0	25.3	25.1	....	29.9	25.1	24.9	.....	30.0	26.9	26.8
.....	22.6	22.0	21.8	....	22.5	22.1	22.2	....	18.2	17.2	17.1	....	20.2	18.6	18.4	.....	25.7	25.5	25.3
8.7	9.1	8.9	9.0	8.3	7.7	8.2	8.4	7.7	9.7	9.6	9.4	8.1	9.6	8.8	8.7	8.5	9.5	8.8	8.8
.....	8.8	8.7	9.6	....	9.3	8.7	9.2	....	7.8	8.3	8.5	....	6.6	7.4	8.2	.....	8.2	7.8	8.6
1.5	2.7	3.1	3.0	1.7	2.9	3.5	3.3	1.0	2.8	3.4	3.3	1.4	1.9	2.6	2.5	1.4	2.0	3.1	2.6
.....	4.8	11.2	11.9	....	5.0	11.5	12.3	....	3.1	10.2	10.3	....	3.3	11.1	12.5	.....	3.5	11.2	12.3
.....	4.4	5.7	5.1	....	5.0	5.8	4.9	....	2.3	3.6	3.7	....	5.0	5.9	5.1	.....	3.0	6.2	6.7
.....	15.0	13.6	14.0	....	15.6	13.4	13.6	....	17.3	14.6	14.0	....	13.3	12.5	12.1	.....	17.1	15.7	15.0
.....	14.1	13.3	13.6	....	16.1	16.0	15.7	....	18.6	18.2	17.3	....	16.3	15.8	15.4	.....	19.6	18.9	18.2
.....	14.7	14.5	14.9	....	18.5	19.4	19.6	....	18.2	19.4	19.4	....	17.5	17.0	17.0	.....	20.9	22.2	21.9
.....	10.9	14.1	14.4	....	12.4	14.3	14.8	....	[2] 13.6	[3] 15.6	[2] 15.2	....	11.1	13.3	13.3	.....	[3] 18.5	[3] 19.5	[3] 20.4
5.6	9.8	6.7	6.9	5.7	10.4	7.2	7.3	5.2	9.5	6.3	6.4	5.1	9.6	6.5	6.7	5.6	9.8	6.5	6.5
54.0	82.8	76.8	76.8	50.0	91.8	90.2	90.0	54.5	71.2	66.6	66.7	62.5	83.4	77.6	77.6	45.0	60.2	57.2	56.8
27.8	37.8	35.9	35.6	30.8	38.3	38.9	39.4	36.3	39.2	36.7	36.8	27.5	37.0	33.5	32.9	32.0	39.6	38.5	38.1
.....	20.9	19.5	20.2	....	25.9	21.0	20.6	....	18.4	17.1	17.5	....	24.2	19.4	19.6	.....	20.5	19.5	19.4
.....	33.8	28.3	27.7	....	33.1	25.0	24.9	....	30.6	25.0	24.8	....	31.4	25.2	25.2	.....	32.7	24.1	23.4
.....	[4] 14.8	[4] 11.5	[4] 11.3	....	[4] 12.3	[4] 9.0	[4] 8.6	....	[4] 13.4	[4] 10.9	[4] 11.0	....	38.6	35.5	37.3	.....	[4] 12.2	[4] 9.9	[4] 9.9
.....	48.4	53.2	54.5	....	49.6	49.6	56.5	....	27.4	36.2	34.5	....	37.8	41.5	47.0	.....	44.1	53.3	59.8

[1] No. 2½ can. [2] No. 3 can. [4] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Memphis, Tenn.				Milwaukee, Wis.				Minneapolis, Minn.			
		Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.
		1913	1921			1913	1921			1913	1921		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	22.1	33.6	27.5	30.0	21.5	37.0	33.6	33.9	20.0	32.1	27.8	28.4
Round steak	do	18.4	30.6	24.2	26.0	20.0	33.1	29.5	29.9	18.5	28.0	24.6	24.9
Rib roast	do	18.7	26.4	22.3	23.1	17.8	29.3	26.0	26.4	18.2	25.3	22.1	22.3
Chuck roast	do	14.4	19.6	15.4	16.9	15.5	24.5	20.7	20.8	15.0	19.4	16.3	16.9
Plate beef	do	11.4	15.4	11.9	13.2	11.3	15.5	13.0	12.7	9.7	12.2	9.2	9.6
Pork chops	do	20.7	32.1	23.8	27.8	18.8	35.1	27.3	29.0	17.8	32.1	26.4	28.1
Bacon	do	29.3	44.9	36.1	38.4	27.3	47.2	39.6	40.6	25.0	47.1	40.7	41.7
Ham	do	26.4	47.4	45.4	50.4	26.8	47.9	44.7	46.9	27.5	48.8	46.6	48.3
Lamb	do	20.4	34.0	35.1	39.1	20.0	35.5	38.2	39.6	15.7	30.6	31.7	32.8
Hens	do	19.6	35.3	31.9	32.8	21.8	40.9	34.7	36.4	19.5	37.6	32.9	34.6
Salmon (canned), red	do	.....	39.2	40.0	40.6	.....	45.5	33.1	33.1	.....	44.9	38.5	39.6
Milk, fresh	Quart	10.0	17.3	15.0	15.0	7.0	10.0	9.0	9.0	7.0	12.0	10.6	10.0
Milk, evaporated	15–16 oz. can	.....	15.8	13.1	12.5	.....	15.2	11.1	11.0	.....	15.0	11.7	11.7
Butter	Pound	42.1	58.0	42.9	44.7	39.6	53.9	43.4	43.3	39.0	53.0	40.3	42.0
Oleomargarine	do	.....	31.3	29.9	28.8	.....	29.5	25.0	25.0	.....	33.5	26.8	26.4
Nut margarine	do	.....	31.6	28.7	27.6	.....	28.6	24.9	24.5	.....	27.8	25.5	25.5
Cheese	do	21.3	38.1	30.6	30.9	22.0	34.9	30.0	30.3	20.3	36.8	30.8	31.9
Lard	do	15.4	18.3	15.3	16.8	15.3	20.0	16.0	17.9	15.3	17.9	14.9	16.5
Crisco	do	.....	23.2	20.8	21.9	.....	25.1	21.3	21.2	.....	25.3	22.1	22.3
Eggs, strictly fresh	Dozen	21.9	37.6	44.4	26.5	23.2	36.6	44.5	28.5	22.4	38.2	45.2	28.4
Bread	Pound	6.0	11.3	9.3	9.0	5.6	10.0	8.4	8.4	5.6	10.3	8.4	8.3
Flour	do	3.6	7.2	5.6	5.7	3.1	5.9	4.7	4.9	2.9	5.7	5.1	5.3
Corn meal	do	2.0	3.0	2.5	2.7	3.3	5.3	3.8	3.8	2.4	4.8	3.8	3.8
Rolled oats	do	.....	11.5	9.6	9.5	.....	7.9	7.4	6.9	.....	7.8	7.9	7.3
Corn flakes	8-oz. pkg	.....	13.4	10.4	10.5	.....	13.0	9.6	9.5	.....	13.4	10.1	10.2
Cream of Wheat	28-oz. pkg	.....	29.3	26.5	26.7	.....	29.8	25.2	25.2	.....	30.8	25.2	25.2
Macaroni	Pound	.....	18.5	17.3	17.6	.....	20.7	17.7	17.8	.....	17.8	17.9	17.6
Rice	do	7.5	6.8	7.8	7.9	9.0	11.0	9.6	9.6	9.1	9.7	9.3	9.0
Beans, navy	do	.....	8.1	8.3	9.4	.....	7.7	7.7	8.5	.....	8.7	8.6	9.1
Potatoes	do	1.6	2.8	3.6	3.2	1.2	2.0	2.8	2.7	1.0	1.9	2.8	2.8
Onions	do	.....	3.6	11.1	11.0	.....	3.4	10.6	11.3	.....	4.3	10.9	11.7
Cabbage	do	.....	3.7	4.5	3.7	.....	4.4	5.9	5.6	.....	3.9	6.2	5.7
Beans, baked	No. 2 can	.....	15.9	14.5	14.4	.....	14.1	11.4	11.0	.....	16.7	14.8	14.4
Corn, canned	do	.....	16.4	14.8	14.8	.....	15.3	14.9	15.0	.....	15.1	14.1	13.9
Peas, canned	do	.....	18.5	17.7	17.9	.....	15.4	15.1	15.4	.....	15.3	15.7	15.9
Tomatoes, canned	do	.....	11.3	13.1	13.6	.....	12.7	14.1	14.3	.....	14.5	14.8	15.2
Sugar, granulated	Pound	5.5	9.8	6.7	6.8	5.4	9.7	6.2	6.2	5.6	9.9	6.6	6.6
Tea	do	63.8	93.1	86.0	88.2	50.0	71.7	68.4	68.4	45.0	68.0	63.4	62.6
Coffee	do	27.5	36.5	37.6	37.8	27.5	33.8	31.9	31.9	30.8	39.8	40.1	40.1
Prunes	do	.....	22.5	20.1	20.3	.....	22.2	19.5	19.7	.....	20.1	18.9	19.4
Raisins	do	.....	32.9	26.6	26.2	.....	30.6	25.4	25.0	.....	31.1	24.9	24.9
Bananas	Dozen	.....	38.4	30.0	31.7	.....	[3] 13.1	[3] 10.1	[3] 10.1	.....	[3] 14.6	[3] 11.1	[3] 11.0
Oranges	do	.....	40.9	46.0	51.7	.....	45.6	51.4	56.2	.....	47.6	52.1	55.1

[1] Whole. [2] No. 3 can. [3] Per pound.

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

Mobile, Ala.			Newark, N. J.				New Haven, Conn.				New Orleans, La.				New York, N. Y.			
			Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.
Mar. 15, 1921.	Feb. 15, 1922.	Mar. 15, 1922.	1913	1921			1913	1921			1913	1921			1913	1921		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
33.5	28.9	28.6	26.2	43.0	37.6	38.2	30.4	48.9	44.6	45.0	20.0	33.0	29.4	31.2	25.4	41.7	38.8	39.1
32.8	28.6	28.6	25.6	42.2	36.8	37.2	26.6	42.4	36.3	36.3	17.5	30.6	26.8	28.0	23.8	40.7	37.2	37.2
28.1	25.5	24.9	20.0	34.1	31.7	32.5	23.0	35.2	32.0	32.3	19.6	28.8	26.3	26.9	21.7	36.4	34.0	34.5
23.2	19.0	19.4	16.8	23.4	20.3	20.2	18.0	26.7	21.9	22.1	13.0	21.8	18.5	19.6	15.8	24.5	20.7	20.8
17.4	15.8	15.4	12.0	13.9	11.7	11.7	.....	15.7	13.4	13.7	11.1	18.1	16.0	16.2	14.5	20.5	18.1	18.4
38.0	31.1	32.4	21.2	35.9	29.2	30.7	21.2	34.5	27.6	30.1	21.1	41.0	30.6	32.7	21.3	36.6	32.3	33.4
48.8	41.5	41.5	23.4	38.4	33.6	35.5	26.7	47.3	39.5	39.2	29.3	48.3	39.5	40.0	23.6	42.6	36.1	36.8
48.8	44.6	47.9	[1] 19.8	[1] 32.5	[1] 30.1	[1] 34.1	30.0	52.7	51.5	56.1	26.0	49.9	46.0	48.7	28.5	52.8	52.6	56.3
36.1	32.8	34.4	21.2	36.2	37.8	39.3	19.0	34.5	35.4	39.1	20.5	37.4	39.1	41.5	17.3	32.5	35.0	36.3
44.0	37.3	37.9	23.2	45.8	37.5	38.6	23.0	47.7	40.9	40.8	23.2	43.7	36.7	40.3	21.1	44.4	36.8	37.7
38.3	31.9	32.1	.....	37.4	29.0	28.2	.....	39.3	36.1	35.5	.....	42.0	37.3	37.1	.....	41.3	30.3	29.8
20.0	15.0	15.0	9.0	17.0	17.0	17.0	9.0	16.0	15.0	14.0	10.0	16.8	14.7	14.7	9.0	15.0	15.0	15.0
15.4	11.9	11.6	.....	14.0	10.6	10.3	.....	14.1	11.3	11.2	.....	14.7	11.2	11.0	.....	13.8	10.4	10.3
64.8	49.4	51.0	43.8	58.2	45.6	46.2	39.0	54.6	44.2	44.4	41.9	60.7	46.8	47.5	41.2	56.8	45.8	45.7
33.5	29.3	29.3	.....	33.6	28.6	28.4	.....	32.8	28.6	28.0	.....	33.7	27.8	27.7	.....	33.9	27.2	27.3
33.7	29.1	28.4	.....	29.1	26.0	26.4	.....	30.5	26.1	26.0	.....	31.4	27.0	26.2	.....	29.6	25.5	25.6
39.1	31.4	32.2	24.5	40.1	33.5	34.3	22.0	37.3	33.1	33.3	21.4	39.8	31.8	32.0	19.8	38.2	33.1	33.3
20.0	16.5	17.7	15.7	19.8	15.3	16.4	15.3	18.9	15.3	16.3	14.6	18.8	14.5	16.9	16.0	19.9	16.0	16.9
25.5	21.9	23.6	.....	22.7	20.2	20.7	.....	24.4	19.8	19.9	.....	24.6	22.5	22.6	.....	23.3	20.0	20.5
40.0	40.8	27.1	35.0	53.0	58.5	36.8	32.0	57.3	61.1	44.0	23.4	36.3	44.2	28.1	31.8	49.9	58.0	36.9
9.9	8.4	8.3	5.6	10.4	8.5	8.6	6.0	10.7	8.4	8.1	5.1	9.5	8.0	8.1	6.0	10.8	9.0	8.9
7.0	5.2	5.4	3.6	6.3	5.0	5.3	3.1	6.3	5.1	5.4	3.8	7.5	5.8	6.0	3.2	6.4	5.1	5.4
3.5	3.0	3.0	3.6	6.8	5.6	5.7	3.2	6.6	5.9	6.0	2.6	3.3	2.8	2.8	3.4	6.7	5.4	5.3
11.5	10.2	9.9	.....	9.2	7.3	7.7	.....	10.2	9.0	8.9	.....	10.4	9.0	8.8	.....	8.7	7.8	7.8
13.8	10.2	10.2	.....	12.0	9.2	9.2	.....	12.6	9.9	9.7	.....	12.5	9.9	9.8	.....	11.7	9.2	9.1
29.9	25.9	25.9	.....	27.7	25.9	25.5	.....	28.8	25.4	25.1	.....	29.8	24.9	24.8	.....	28.6	25.3	25.1
20.0	20.0	19.8	.....	22.6	21.6	21.5	.....	22.3	22.1	22.1	.....	9.9	9.7	9.5	.....	22.3	21.2	21.4
8.4	8.4	8.3	9.0	9.1	8.5	8.8	9.3	10.9	9.1	9.1	7.4	7.6	8.2	8.4	8.0	9.5	9.0	9.1
9.3	9.0	9.2	.....	8.1	7.8	8.2	.....	8.5	8.0	8.7	.....	7.3	7.6	8.6	.....	8.9	8.5	8.7
3.2	3.6	3.6	2.4	3.0	3.7	3.4	1.6	2.4	3.3	3.1	1.9	3.3	4.1	3.9	2.3	3.1	4.2	3.8
3.9	11.4	12.1	.....	5.1	11.4	11.7	.....	3.8	10.3	11.5	.....	3.5	10.1	10.6	.....	3.9	10.8	11.4
3.4	3.9	3.3	.....	3.8	6.3	6.4	.....	3.7	6.8	7.0	.....	3.2	5.0	3.5	.....	2.9	5.2	5.8
15.1	13.2	13.4	.....	12.3	11.3	11.3	.....	15.4	12.7	12.3	.....	15.3	12.5	12.6	.....	13.5	12.2	11.8
17.0	16.6	16.3	.....	16.6	15.5	15.5	.....	20.4	18.1	18.3	.....	14.9	13.9	14.1	.....	16.0	14.5	14.2
18.3	17.2	17.0	.....	17.6	17.9	17.9	.....	22.3	21.4	21.2	.....	17.5	16.9	17.0	.....	17.0	16.1	16.2
10.6	13.1	13.4	.....	10.1	11.8	12.6	.....	[2] 22.9	[2] 22.7	[2] 22.2	.....	12.2	13.1	13.3	.....	10.5	12.2	12.2
10.7	6.7	6.9	5.2	9.2	5.6	5.5	5.1	9.3	6.0	6.1	5.2	9.1	6.0	6.1	4.8	9.0	5.4	5.7
79.8	71.4	71.7	53.8	49.4	49.8	49.5	55.0	57.7	54.7	55.5	62.1	71.8	70.9	70.8	43.3	53.6	49.8	48.5
35.6	34.6	33.1	29.3	31.2	32.6	32.6	33.8	39.2	38.0	37.9	26.3	31.5	31.1	30.8	27.5	32.7	31.7	32.2
23.3	16.7	17.5	.....	18.5	16.6	17.4	.....	18.3	17.9	18.1	.....	20.9	18.3	18.3	.....	19.3	18.0	18.6
32.3	25.3	24.5	.....	30.2	21.1	21.4	.....	30.6	23.6	23.3	.....	32.1	25.4	25.5	.....	30.7	23.4	23.2
25.5	25.9	25.8	.....	48.1	40.0	40.0	.....	38.7	34.6	34.3	.....	22.5	20.0	22.5	.....	42.8	44.1	42.5
39.6	45.0	51.4	.....	47.7	53.4	55.7	.....	44.2	49.9	54.9	.....	40.5	46.3	56.1	.....	49.0	55.0	54.3

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Norfolk, Va.			Omaha, Nebr.				Peoria, Ill.		
		Mar. 15, 1921.	Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15— 1913	Mar. 15— 1921	Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15, 1921.	Feb. 15, 1922.	Mar. 15, 1922.
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	43.1	36.0	37.8	24.5	36.1	32.0	33.6	34.3	29.6	31.9
Round steak	do	36.4	29.4	30.7	20.8	31.9	27.3	29.5	33.2	28.0	29.7
Rib roast	do	34.8	29.0	30.3	17.9	26.4	24.1	24.4	26.1	22.1	23.5
Chuck roast	do	24.8	19.8	20.3	15.5	19.5	18.7	19.0	22.7	18.1	20.4
Plate beef	do	17.3	13.2	13.5	10.3	12.3	10.4	11.0	15.3	11.7	12.7
Pork chops	do	33.6	26.5	28.7	18.2	34.0	27.2	29.9	34.7	26.4	30.5
Bacon	do	44.0	32.9	34.6	27.0	49.4	45.0	46.1	47.5	39.3	41.6
Ham	do	43.3	40.0	41.3	29.0	51.2	50.0	54.3	50.0	47.7	50.0
Lamb	do	36.3	37.5	38.8	18.0	31.4	35.1	36.9	34.6	34.6	36.4
Hens	do	45.5	37.2	38.2	18.5	36.2	32.1	33.4	38.3	33.3	33.1
Salmon (canned), red	do	35.5	30.4	29.8	.....	38.7	33.1	33.3	37.4	33.7	33.2
Milk, fresh	Quart	20.0	17.0	17.0	8.1	13.4	11.0	11.0	13.3	11.7	11.2
Milk, evaporated	15–16 oz. can	15.0	11.1	10.6	.....	15.1	11.9	11.3	14.7	11.5	11.0
Butter	Pound	62.5	46.5	48.1	39.6	53.9	42.3	41.5	54.0	41.4	42.3
Oleomargarine	do	39.8	28.6	29.0	.....	37.3	29.1	29.2	33.7	28.1	28.1
Nut margarine	do	32.5	28.1	28.1	.....	31.9	28.1	27.9	31.3	27.5	27.3
Cheese	do	38.1	31.2	31.7	22.9	37.8	32.3	31.1	37.9	33.0	33.1
Lard	do	19.2	15.9	16.7	17.3	21.9	18.0	20.0	19.9	15.6	17.3
Crisco	do	23.5	20.3	21.0	.....	26.3	22.5	23.1	25.5	22.5	22.1
Eggs, strictly fresh	Dozen	38.4	50.2	27.5	20.5	35.0	41.0	27.3	34.8	39.1	25.9
Bread	Pound	10.0	7.3	8.0	5.2	11.8	9.8	9.8	10.8	9.4	9.4
Flour	do	6.7	5.0	5.2	2.9	5.6	4.2	4.4	6.2	5.0	5.2
Corn meal	do	4.4	3.1	3.0	2.3	4.6	3.3	3.3	4.5	3.6	3.6
Rolled oats	do	10.1	8.2	8.2	.....	11.1	9.8	10.2	11.6	9.1	8.9
Corn flakes	8-oz. pkg	13.3	10.1	9.9	.....	14.7	10.7	11.2	14.3	10.3	10.4
Cream of Wheat	28-oz. pkg	28.5	26.0	26.5	.....	31.6	25.9	25.7	31.1	27.8	27.6
Macaroni	Pound	20.2	19.6	19.8	.....	20.9	19.4	19.5	19.6	20.5	20.5
Rice	do	11.6	9.9	9.8	8.5	10.4	8.7	8.4	10.1	9.1	9.9
Beans, navy	do	8.8	8.5	9.3	.....	8.0	8.8	9.1	7.9	8.2	9.1
Potatoes	do	3.1	3.5	3.2	1.3	2.4	3.0	2.9	2.1	2.9	2.8
Onions	do	4.7	10.7	12.6	.....	3.7	11.8	12.1	4.2	10.9	11.9
Cabbage	do	4.8	5.3	4.9	.....	4.1	6.3	5.3	4.7	5.8	5.5
Beans, baked	No. 2 can	11.6	10.6	10.4	.....	17.0	14.5	14.6	15.7	13.2	12.9
Corn, canned	do	17.1	15.2	15.0	.....	14.9	15.5	15.5	15.7	15.1	14.7
Peas, canned	do	21.2	20.7	20.3	.....	15.6	16.5	16.3	17.3	16.6	16.4
Tomatoes, canned	do	12.7	12.4	12.7	.....	12.5	14.2	14.4	12.9	13.9	14.3
Sugar, granulated	Pound	9.6	6.1	6.1	5.7	9.8	6.4	6.7	9.7	6.8	6.8
Tea	do	84.3	74.8	74.6	56.0	74.1	70.6	70.9	66.4	61.4	61.0
Coffee	do	40.8	37.0	36.9	30.0	38.6	37.9	37.5	34.8	32.9	32.9
Prunes	do	21.0	18.8	18.3	.....	22.6	20.1	20.0	26.6	22.0	22.3
Raisins	do	32.4	24.9	24.5	.....	33.9	27.8	27.6	32.4	28.5	27.8
Bananas	Dozen	41.1	33.6	34.2	.....	[1] 14.0	[1] 10.5	[1] 10.5	[1] 12.2	[1] 10.4	[1] 10.5
Oranges	do	46.2	43.3	49.6	.....	39.8	50.4	50.1	44.4	48.4	51.1

[1] The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

Philadelphia, Pa.				Pittsburgh, Pa.				Portland, Me.			Portland, Oreg.				Providence, R. I.			
Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15, 1921.	Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.
1913	1921			1913	1921						1913	1921			1913	1921		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
[1]28.6	[1]47.7	[1]42.9	[1]44.5	26.0	43.9	38.1	38.6	[1]36.1	[1]51.7	[1]52.0	22.4	30.5	28.2	28.2	[1]39.2	[1]65.5	[1]60.8	[1]62.1
23.5	40.3	33.9	35.1	22.0	37.3	31.6	31.8	44.5	40.2	41.5	20.0	28.3	25.5	25.5	29.8	50.7	44.4	44.3
21.4	35.0	29.7	31.0	21.8	33.6	28.9	29.0	30.7	27.3	27.7	18.7	27.0	24.0	24.4	24.4	37.4	33.9	33.8
16.5	22.4	18.5	19.0	16.2	24.7	19.7	20.1	20.5	18.2	18.4	15.8	20.1	17.2	17.0	18.4	29.1	24.6	25.5
11.4	13.4	10.2	10.4	11.6	14.0	11.0	10.6	15.6	13.1	12.9	13.0	15.1	12.7	12.8	.....	20.1	15.7	16.1
20.3	36.6	31.2	34.1	21.3	35.1	29.3	31.7	35.7	29.8	32.6	20.2	35.3	31.4	31.7	20.0	39.5	32.3	35.3
23.8	40.8	34.8	36.4	28.1	47.8	38.3	38.4	44.2	35.5	36.3	28.1	48.6	43.2	44.2	21.8	41.3	34.5	35.2
29.7	53.3	52.1	55.6	28.8	55.7	51.1	55.8	49.2	48.8	51.9	29.7	47.7	45.6	49.3	28.5	55.8	55.2	58.4
18.6	37.3	38.9	40.1	22.5	37.9	38.5	39.5	33.8	36.7	37.4	17.6	32.5	31.1	34.0	19.3	38.9	40.5	42.5
21.8	47.1	39.2	40.2	26.4	49.1	42.0	42.9	49.3	43.2	44.5	21.5	40.6	35.1	35.6	23.0	49.6	43.2	43.1
.....	33.8	28.0	27.9	.....	37.0	29.6	29.6	37.2	29.1	28.9	.....	44.4	41.4	41.4	.....	40.6	32.5	32.0
8.0	13.0	11.0	11.0	8.8	14.0	12.0	12.0	15.5	13.0	13.0	9.3	14.8	11.9	11.8	9.0	15.5	13.8	13.6
.....	14.7	11.6	11.4	.....	14.7	10.7	10.4	15.1	12.2	12.0	.....	14.0	11.6	11.6	.....	15.5	12.2	11.8
47.5	64.6	51.8	51.3	43.4	59.2	46.7	46.9	62.5	49.0	48.3	44.5	54.0	46.3	44.3	42.2	55.5	44.3	44.3
.....	33.7	26.6	26.8	.....	31.1	26.1	25.8	38.7	32.4	30.9	.....	36.0	29.7	28.6	.....	36.4	29.6	29.7
.....	30.8	26.8	27.0	.....	30.1	26.2	26.3	31.5	28.2	27.6	.....	34.3	28.6	28.2	.....	30.6	28.7	28.0
25.0	41.4	35.0	36.1	24.5	39.1	33.1	33.1	38.4	34.4	33.7	20.5	43.2	35.6	35.5	22.3	39.1	32.7	32.9
15.0	17.7	14.5	16.3	15.1	17.8	13.5	15.1	18.5	15.5	17.6	17.9	25.5	18.5	19.3	15.2	19.1	15.2	17.0
.....	22.4	20.0	20.3	.....	24.3	20.1	20.4	25.3	22.3	22.1	.....	26.5	24.2	24.3	.....	25.3	22.0	22.1
25.4	44.4	53.6	32.9	25.4	40.7	50.4	31.0	53.3	58.5	41.1	24.5	35.1	36.6	24.6	31.8	56.9	62.3	44.3
4.8	9.6	8.8	8.7	5.4	10.4	8.1	8.1	11.0	9.1	9.0	5.6	9.5	8.4	9.3	6.0	11.5	8.9	8.9
3.2	6.2	5.0	5.3	3.1	6.3	4.9	5.1	6.5	5.1	5.5	2.9	5.9	4.3	4.6	3.4	6.8	5.6	5.8
2.8	4.5	3.7	3.9	2.7	5.2	4.0	3.9	5.1	4.1	3.9	3.4	5.2	3.6	3.4	2.9	4.9	3.8	3.9
.....	9.2	8.0	8.4	.....	11.1	9.3	9.1	7.9	6.9	6.9	.....	9.8	9.3	9.4	.....	10.9	9.3	9.4
.....	12.3	9.9	9.9	.....	13.3	10.0	9.7	13.6	10.5	10.1	.....	13.8	12.1	11.7	.....	13.7	10.0	9.9
.....	28.4	25.3	25.2	.....	30.0	26.3	25.4	29.3	26.3	26.6	.....	32.5	29.1	28.9	.....	30.2	27.2	26.5
.....	21.8	21.2	21.4	.....	22.3	20.9	20.7	24.0	24.2	24.2	.....	16.6	17.5	17.5	.....	23.9	22.7	22.5
9.8	10.7	10.3	10.2	9.2	11.2	9.7	9.9	11.0	10.3	10.4	8.6	10.6	9.6	10.0	9.3	10.9	9.8	9.8
.....	8.8	8.3	8.5	.....	7.9	7.5	8.4	8.2	8.1	8.6	.....	7.6	7.9	8.2	.....	8.4	8.0	8.7
2.1	2.6	3.9	3.7	1.5	2.3	3.1	2.9	2.0	2.9	2.6	.7	1.8	2.4	2.2	1.6	2.3	3.0	2.8
.....	3.2	10.3	11.0	.....	3.9	10.4	12.0	3.1	11.4	12.2	.....	2.8	9.3	9.7	.....	3.7	11.3	11.9
.....	2.8	5.8	5.6	.....	5.0	5.1	5.8	2.0	4.1	4.2	.....	3.4	5.3	5.8	.....	5.3	6.5	6.5
.....	13.2	11.7	11.6	.....	14.6	12.6	12.6	18.1	16.1	15.3	.....	19.5	17.7	17.8	.....	15.0	12.8	12.4
.....	16.1	15.2	15.2	.....	15.5	14.9	14.4	17.8	16.4	16.1	.....	19.7	18.0	18.0	.....	19.1	18.1	18.2
.....	16.5	16.5	16.6	.....	16.3	15.5	15.5	19.5	20.1	20.3	.....	19.2	18.6	18.5	.....	20.6	20.5	19.9
.....	11.0	12.3	12.3	.....	11.6	13.2	13.2	[2]20.3	[2]22.2	[2]22.6	.....	[2]14.7	[2]15.2	[2]15.2	.....	13.5	13.8	13.6
4.9	8.8	5.6	5.7	5.6	10.0	6.3	6.3	9.7	6.1	6.3	6.3	10.1	6.7	7.1	5.0	9.6	6.1	6.3
54.0	61.7	60.4	60.4	58.0	77.3	75.8	76.8	57.1	57.0	57.0	55.0	65.3	62.5	61.9	48.3	59.4	58.5	58.3
25.0	31.7	29.5	29.3	30.0	38.6	35.6	35.7	40.2	38.9	38.6	35.0	38.8	36.9	36.9	30.0	40.0	39.4	39.2
.....	19.5	16.6	16.4	.....	21.3	19.9	20.6	18.3	17.6	18.4	.....	11.4	14.8	16.0	.....	22.1	18.9	19.6
.....	28.8	23.2	23.3	.....	32.5	26.0	25.2	31.0	23.6	23.1	.....	30.9	24.6	24.6	.....	30.1	23.5	23.5
.....	39.0	34.0	33.7	.....	47.8	40.7	42.1	[4]13.8	[4]10.2	[4]10.2	.....	[4]15.2	13.3	13.5	.....	43.1	35.1	35.3
.....	44.2	48.7	57.4	.....	47.5	46.9	57.3	43.4	54.2	59-8	.....	46.7	49.6	50.3	.....	51.3	54.6	61.2

[2] No. 3 can. [3] No. 2½ can. [4] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Richmond, Va.				Rochester, N.Y.			St. Louis, Mo.			
		Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15, 1921.	Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.
		1913	1921						1913	1921		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	22.2	41.1	36.9	37.9	37.3	34.4	34.6	22.8	35.0	31.5	32.7
Round steak	do	19.6	36.4	31.9	32.3	32.8	28.6	28.6	20.2	33.4	29.2	29.5
Rib roast	do	18.9	32.3	29.7	28.7	28.4	25.9	25.7	18.4	29.1	26.7	26.8
Chuck roast	do	15.3	25.2	21.3	21.4	23.7	20.5	21.2	15.4	20.2	18.9	18.5
Plate beef	do	11.4	19.0	16.4	16.4	15.0	11.5	11.3	10.7	15.4	13.1	13.8
Pork chops	do	19.4	34.4	28.9	30.4	33.5	31.6	32.8	18.0	31.3	24.3	27.8
Bacon	do	23.6	38.5	33.9	34.1	35.8	31.4	31.3	23.8	38.9	34.8	37.0
Ham	do	24.0	43.9	39.8	44.1	47.6	45.1	49.4	26.7	47.8	44.5	49.0
Lamb	do	19.3	41.3	40.6	41.7	35.0	35.7	37.6	17.1	32.7	34.4	28.2
Hens	do	22.0	43.3	37.5	37.9	46.8	40.9	42.1	18.6	39.5	33.2	34.9
Salmon (canned), red	do	.....	[1]19.3	[1]15.1	[1]15.3	37.1	30.9	30.4	.....	36.5	32.2	32.6
Milk, fresh	Quart	10.0	14.0	14.0	14.0	12.5	13.5	13.0	8.0	14.0	10.0	10.0
Milk, evaporated	15-16 oz. can	.....	15.1	13.2	12.6	14.9	12.0	11.6	.....	13.9	10.1	10.0
Butter	Pound	44.2	64.8	53.2	52.5	56.8	45.7	44.7	41.2	57.9	45.6	46.3
Oleomargarine	do	.....	36.3	31.7	30.9	34.8	29.3	28.8	.....	31.6	26.5	26.4
Nut margarine	do	.....	33.2	28.1	27.9	30.3	27.6	26.9	.....	28.9	25.0	25.0
Cheese	do	22.3	39.1	33.1	32.9	37.4	33.9	33.0	20.3	36.8	31.2	31.0
Lard	do	15.0	19.8	17.2	18.1	18.8	15.5	16.8	13.6	13.8	12.4	14.3
Crisco	do	.....	24.0	21.8	21.7	24.0	20.9	21.1	.....	23.4	20.3	20.5
Eggs, strictly fresh	Dozen	21.8	35.5	54.4	29.1	43.7	53.4	34.1	22.0	36.8	43.3	27.9
Bread	Pound	5.3	11.1	9.1	9.1	10.0	8.1	8.1	5.5	11.2	9.6	9.6
Flour	do	3.3	6.6	5.2	5.4	6.2	4.9	5.2	3.0	5.7	4.5	4.7
Corn meal	do	2.0	4.2	3.9	3.9	5.7	4.9	4.6	2.1	3.4	2.6	2.7
Rolled oats	do	.....	11.4	10.4	10.1	7.9	6.9	7.1	.....	9.6	7.9	8.3
Corn flakes	8-oz. pkg.	.....	13.7	10.7	10.3	13.5	9.9	9.8	.....	11.5	9.2	9.2
Cream of wheat	28-oz. pkg.	.....	30.5	28.3	27.9	29.0	25.1	25.0	.....	30.5	25.1	25.0
Macaroni	Pound	.....	21.7	21.3	21.5	20.5	19.0	19.4	.....	21.0	21.3	21.7
Rice	do	9.8	12.0	11.8	11.6	9.9	9.3	9.5	8.6	8.5	8.4	8.8
Beans, navy	do	.....	9.0	9.5	9.1	8.5	8.1	8.5	.....	7.4	7.6	8.5
Potatoes	do	1.7	2.9	4.5	4.3	1.4	2.5	2.5	1.3	2.5	3.3	3.3
Onions	do	.....	4.7	10.9	11.9	2.6	9.9	10.4	.....	3.2	11.6	11.5
Cabbage	do	.....	4.2	6.6	6.2	2.2	4.7	5.0	.....	3.6	4.8	4.5
Beans, baked	No. 2 can	.....	12.1	12.4	12.0	12.5	11.3	11.0	.....	12.3	11.2	11.1
Corn, canned	do	.....	16.5	15.7	15.3	16.9	15.8	15.2	.....	15.2	14.8	15.0
Peas, canned	do	.....	20.7	19.6	19.6	19.0	19.3	19.0	.....	16.5	16.5	16.4
Tomatoes, canned	do	.....	12.1	13.4	13.4	12.1	12.5	13.1	.....	11.2	13.4	13.8
Sugar, granulated	Pound	5.1	9.7	6.6	6.5	9.3	6.0	6.1	5.1	9.3	6.1	6.3
Tea	do	56.0	86.8	79.8	78.7	61.3	60.3	60.3	55.0	69.7	69.0	68.8
Coffee	do	27.4	37.8	35.7	35.2	35.5	33.3	33.1	24.3	34.0	33.1	33.9
Prunes	do	.....	24.2	21.3	20.2	22.1	18.9	19.6	.....	21.3	19.1	20.2
Raisins	do	.....	31.5	24.1	23.8	30.5	25.6	24.8	.....	31.2	24.9	25.2
Bananas	Dozen	.....	44.5	38.8	38.8	46.8	41.3	41.3	.....	37.9	31.9	32.5
Oranges	do	.....	40.8	41.3	51.5	46.9	50.3	55.5	.....	43.9	46.3	50.7

[1] Pink. [2] No. 2½ can. [3] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

St. Paul, Minn.			Salt Lake City, Utah.				San Francisco, Calif.				Savannah, Ga.			Scranton, Pa.			
			Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.				Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.
Mar. 15, 1921.	Feb. 15, 1922.	Mar. 15, 1922.	1913	1921			1913	1921			Mar. 15, 1921.	Feb. 15, 1922.	Mar. 15, 1922.	1913	1921		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
35.9	30.8	30.8	22.1	30.6	26.5	27.0	20.3	31.5	30.3	30.6	33.6	30.0	29.6	22.3	46.6	45.0	45.2
29.6	25.3	25.4	19.3	27.9	23.1	24.0	19.0	29.3	27.5	27.8	28.7	25.0	25.0	18.5	38.8	34.6	35.1
30.5	24.2	25.2	18.5	24.4	21.6	22.1	20.7	30.2	28.0	29.0	26.2	23.6	23.3	18.8	35.2	32.8	33.7
22.9	18.1	18.8	15.0	20.1	17.1	17.0	14.6	20.6	18.5	19.8	19.5	16.3	16.3	14.9	26.9	23.6	24.1
13.9	9.9	10.3	11.4	13.8	11.8	11.6	12.9	17.1	14.7	15.0	16.0	13.5	14.0	10.5	14.4	11.6	11.1
32.6	26.5	27.9	21.7	34.1	30.2	30.9	24.0	40.3	36.6	39.2	32.2	26.5	26.8	19.5	37.5	32.6	34.7
45.0	40.0	40.8	31.7	46.2	37.7	39.7	32.8	57.5	53.3	53.7	40.7	33.7	35.6	24.2	44.2	42.1	43.1
48.3	45.5	48.9	29.3	46.5	43.3	47.0	30.0	55.4	52.5	57.0	43.0	39.8	40.9	27.0	52.9	52.7	56.2
31.3	33.2	34.2	18.2	28.7	29.3	33.1	17.3	34.5	32.7	36.4	41.0	36.7	39.2	20.7	43.1	42.8	44.1
37.6	33.3	34.2	24.7	40.6	34.8	36.1	23.8	50.1	42.8	41.3	36.4	32.9	34.6	22.5	50.9	45.7	45.9
40.0	36.6	36.6	.....	39.2	36.5	35.9	.....	33.6	27.6	27.5	42.7	37.8	36.2	.....	44.3	38.4	38.0
12.0	10.0	10.0	8.7	12.5	9.0	9.0	10.0	14.8	13.0	13.0	21.3	18.0	16.5	8.8	13.0	13.0	12.0
14.5	12.0	12.0	.....	14.5	11.4	11.2	.....	13.1	10.6	10.3	14.3	10.5	10.2	.....	14.5	12.0	11.7
51.1	39.7	41.8	40.6	54.0	44.2	39.9	42.9	49.6	53.7	47.1	61.8	46.5	45.9	40.6	56.0	45.0	44.1
33.8	27.8	27.8	.....	39.0	.....	.....	.....	31.0	29.8	28.7	39.5	32.5	31.5	.....	33.7	28.0	26.5
29.1	27.0	26.3	.....	34.0	29.5	28.5	.....	30.8	27.7	27.8	32.2	31.3	29.6	.....	32.0	28.3	26.7
36.8	31.6	32.1	24.2	37.5	27.8	27.3	20.0	37.6	36.3	34.9	37.9	31.3	31.1	18.8	36.7	31.8	31.4
19.5	15.4	16.9	18.7	23.0	17.7	19.2	16.9	24.0	18.1	19.2	19.3	18.0	18.3	15.8	20.1	16.9	17.5
29.0	24.4	24.3	.....	31.0	24.8	25.3	.....	24.8	22.6	23.2	24.3	20.3	20.5	.....	25.5	22.4	21.9
38.1	44.9	29.8	23.1	38.7	43.0	28.9	23.5	39.4	35.8	29.6	38.1	39.8	26.3	26.3	45.3	56.6	39.1
10.4	8.4	8.4	5.9	11.8	9.4	9.4	5.7	9.6	8.5	8.5	11.2	8.0	7.8	5.6	12.3	9.6	9.6
5.9	5.2	5.5	2.5	4.4	3.2	3.5	3.3	6.8	5.1	5.5	6.9	5.5	5.7	3.4	7.1	5.7	5.7
4.7	3.7	3.5	3.4	4.9	3.5	3.6	3.4	5.7	4.9	4.6	3.0	2.6	2.6	.....	7.8	6.9	6.5
9.6	9.8	9.7	.....	9.4	9.9	9.7	.....	11.0	10.0	9.4	11.3	9.0	8.9	.....	11.6	10.3	9.9
14.6	10.7	10.2	.....	15.2	12.8	12.6	.....	14.0	11.7	11.5	13.5	9.3	9.1	.....	13.3	10.7	10.1
30.0	26.0	26.2	.....	33.4	27.3	26.9	.....	28.9	25.4	24.9	29.8	26.3	25.7	.....	29.1	28.0	27.4
19.6	18.5	18.8	.....	21.8	20.9	21.3	.....	14.7	12.7	12.7	22.2	19.0	19.2	.....	24.6	23.5	23.2
9.8	9.1	9.3	8.2	9.3	8.6	8.8	8.5	10.0	8.9	8.8	8.3	8.0	8.0	8.5	10.4	9.8	9.8
9.1	8.9	9.0	.....	9.7	8.7	8.9	.....	7.4	7.5	7.4	10.1	9.2	9.3	.....	10.5	9.6	9.9
1.9	2.8	2.9	.9	1.6	2.1	2.2	1.2	2.9	3.4	3.5	3.1	3.6	3.4	1.5	2.1	3.1	3.1
3.3	9.7	11.0	.....	3.1	11.0	11.6	.....	2.3	8.8	9.5	4.5	11.6	13.3	.....	3.9	10.6	11.7
4.0	6.1	5.4	.....	3.2	6.3	6.2	.....	.....	.....	.....	4.8	6.4	5.2	.....	6.1	6.0	6.5
18.0	14.3	14.0	.....	17.5	17.7	18.0	.....	18.4	15.6	15.4	14.5	12.7	12.2	.....	13.7	12.9	12.5
17.1	15.4	15.3	.....	17.8	15.0	15.1	.....	18.6	17.1	17.0	15.6	15.5	14.2	.....	17.0	17.5	17.0
17.3	16.3	16.3	.....	16.5	15.2	15.5	.....	19.1	18.0	18.0	18.3	16.7	17.0	.....	17.1	17.7	17.7
13.6	14.1	14.3	.....	13.2	12.5	12.5	.....	[2] 11.6	[2] 14.1	[2] 14.5	11.1	12.7	12.3	.....	12.5	13.1	13.3
10.0	6.6	6.6	6.3	10.3	7.5	7.5	5.3	9.9	6.2	6.4	9.3	6.0	5.9	6.1	9.7	6.6	6.6
72.5	64.2	64.2	65.7	83.3	80.9	80.3	50.0	59.8	55.3	55.8	74.2	69.3	66.1	52.5	64.3	61.0	59.2
41.6	40.4	39.6	35.8	49.6	44.3	44.3	32.0	37.2	34.4	34.0	32.8	30.8	31.2	31.3	40.4	38.0	37.5
22.1	19.8	20.2	.....	19.8	16.6	17.8	.....	17.9	16.9	17.8	21.6	18.1	18.4	.....	18.8	17.5	17.2
32.3	27.2	27.0	.....	30.0	25.3	25.3	.....	29.0	22.6	22.6	31.6	23.7	22.4	.....	31.4	25.6	24.9
[1] 14.2	[1] 11.9	[1] 12.0	.....	[1] 17.8	[1] 16.1	[1] 16.2	.....	44.3	35.0	36.4	45.0	33.2	31.3	.....	36.3	35.6	35.9
53.9	55.4	57.7	.....	39.2	45.1	49.0	.....	43.9	52.3	53.1	38.7	41.2	49.3	.....	47.2	53.3	57.4

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Concluded.

Article.	Unit.	Seattle, Wash.				Springfield, Ill.			Washington, D.C.			
		Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15, 1921.	Feb. 15, 1922.	Mar. 15, 1922.	Mar. 15—		Feb. 15, 1922.	Mar. 15, 1922.
		1913	1921						1913	1921		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	21.8	32.9	30.0	30.6	36.8	30.1	31.3	26.4	46.0	41.1	41.2
Round steak	do	20.0	29.6	26.4	27.0	35.2	29.4	31.1	23.1	40.0	33.9	34.1
Rib roast	do	18.2	27.2	23.3	24.2	24.8	21.0	21.7	21.0	35.9	31.7	32.1
Chuck roast	do	15.0	19.8	17.1	17.8	20.3	17.8	18.9	16.6	26.6	22.3	22.7
Plate beef	do	11.2	16.1	13.7	13.8	15.0	12.0	12.9	11.7	15.0	12.2	12.9
Pork chops	do	23.4	38.4	33.0	34.4	33.8	25.8	29.6	21.9	38.6	33.1	33.9
Bacon	do	30.0	54.0	47.0	48.8	42.7	37.2	37.4	25.4	41.5	35.5	37.3
Ham	do	30.0	52.6	49.3	52.7	48.9	44.8	47.7	28.6	55.8	53.8	56.4
Lamb	do	18.2	32.5	31.4	32.8	35.0	36.7	40.6	21.4	40.2	41.9	45.9
Hens	do	24.0	41.9	36.0	35.6	36.0	32.8	33.3	22.1	47.8	41.5	42.6
Salmon (canned), red	do		36.7	31.5	31.1	39.8	34.9	34.9		37.5	30.5	30.5
Milk, fresh	Quart	8.6	12.8	13.0	13.0	13.4	12.5	12.5	9.0	16.0	14.0	13.9
Milk, evaporated	15–16 oz. can		12.4	10.7	10.5	15.7	12.4	12.1		14.9	11.9	11.6
Butter	Pound	44.0	53.4	47.8	45.0	58.9	44.3	44.9	44.1	62.5	48.5	49.1
Oleomargarine	do		32.3	29.0	28.6	32.8	28.9	28.8		35.8	27.3	27.4
Nut margarine	do		33.0	29.4	28.9	30.4	27.6	27.5		32.3	27.3	27.4
Cheese	do	21.6	40.5	33.8	33.5	40.8	34.3	34.2	23.5	40.2	35.8	36.4
Lard	do	17.3	23.7	17.0	18.7	19.4	14.7	17.7	14.6	18.5	15.3	17.3
Crisco	do		26.1	23.7	24.3	24.9	22.0	22.1		24.5	21.5	21.6
Eggs, strictly fresh	Dozen	23.5	38.2	39.0	29.2	36.8	41.1	27.3	22.6	40.0	56.0	32.6
Bread	Pound	5.5	10.0	8.1	8.2	11.7	9.6	9.6	5.5	10.6	8.6	8.8
Flour	do	3.0	5.7	4.6	5.1	6.3	5.3	5.5	3.6	6.8	5.4	5.6
Corn meal	do	3.0	5.2	3.7	3.8	5.1	4.2	4.2	2.5	4.2	3.6	3.7
Rolled oats	do		8.8	8.4	8.5	11.4	11.0	10.4		11.3	9.6	9.8
Corn flakes	8-oz. pkg		14.0	12.3	12.1	14.8	10.7	10.5		12.5	10.0	10.6
Cream of Wheat	28-oz. pkg		30.6	27.4	27.6	30.3	28.0	28.2		29.2	26.0	25.6
Macaroni	Pound		18.4	18.9	18.7	22.7	20.2	20.1		22.9	21.8	21.4
Rice	do	7.7	11.4	10.5	10.4	10.2	9.4	10.0	9.4	10.8	10.0	10.0
Beans, navy	do		7.4	8.1	8.4	8.0	7.9	9.0		8.1	8.4	8.6
Potatoes	do	.9	2.0	2.6	2.5	2.8	3.1	3.1	1.5	2.3	3.9	3.6
Onions	do		3.1	9.9	10.3	4.3	12.8	13.1		4.1	12.0	12.3
Cabbage	do		4.7	5.2	6.3	3.8	6.0	5.7		5.6	6.4	5.0
Beans, baked	No. 2 can		18.5	16.7	16.7	16.3	13.2	13.0		12.7	11.6	11.6
Corn, canned	do		18.0	17.8	17.3	15.7	15.3	15.2		14.6	15.0	15.0
Peas, canned	do		17.8	18.2	18.5	17.8	17.6	16.9		15.9	16.4	16.7
Tomatoes, canned	do		[1] 13.4	[1] 8.9	[1] 9.0	13.1	14.9	15.3		11.0	13.3	13.6
Sugar, granulated	Pound	6.1	10.0	6.9	7.1	10.1	6.9	7.2	5.0	9.6	6.3	6.3
Tea	do	50.0	66.4	62.8	63.2	82.8	70.0	70.9	57.5	75.6	71.8	71.5
Coffee	do	28.0	39.3	38.6	38.6	38.0	35.8	36.1	28.8	34.2	31.6	33.0
Prunes	do		18.0	17.7	19.4	24.2	19.5	19.8		21.8	20.8	20.1
Raisins	do		30.6	25.0	24.7	35.8	25.7	26.0		31.4	24.4	24.5
Bananas	Dozen		[2] 17.3	[2] 15.1	[2] 15.1	[2] 12.0	[2] 9.6	[2] 10.0		45.3	40.0	38.4
Oranges	do		42.9	49.4	55.4	39.7	51.0	57.7		43.7	48.1	53.3

[1] No. 2½ can. [2] Per pound.

Comparison of Retail Food Costs in 51 Cities.

TABLE 6 shows for 39 cities the percentage of increase or decrease in the retail cost of food [7] in March, 1922, compared with the average cost in the year 1913, in March, 1921, and in February, 1922. For 12 other cities comparisons are given for the one-year and the one-month periods. These cities have been scheduled by the bureau at different dates since 1913. These percentage changes are based on actual retail prices secured each month from retail dealers and on the average family consumption of these articles in each city.[8]

[7] For list of articles, see note 2, p. 25.

[8] The consumption figure used from January, 1913, to December, 1920, for each article in each city is given in the MONTHLY LABOR REVIEW for November, 1918, pp. 94 and 95. The consumption figures which have been used for each month beginning with January, 1921, are given in the MONTHLY LABOR REVIEW for March, 1921, p. 26.

Effort has been made by the bureau each month to have perfect reporting cities. For the month of March 99.7 per cent of all the firms reporting in the 51 cities sent in a report promptly. The following were perfect reporting cities; that is, every merchant in the following-named 47 cities who is cooperating with the bureau sent in his report in time for his prices to be included in the city averages: Atlanta, Baltimore, Birmingham, Boston, Bridgeport, Buffalo, Charleston, Chicago, Cincinnati, Cleveland, Columbus, Dallas, Denver, Detroit, Fall River, Houston, Indianapolis, Jacksonville, Little Rock, Los Angeles, Louisville, Manchester, Memphis, Milwaukee, Minneapolis, Mobile, Newark, New Haven, New York, Norfolk, Omaha, Peoria, Philadelphia, Pittsburgh, Portland, Me., Portland, Oreg., Providence, Richmond, Rochester, St. Louis, St. Paul, Salt Lake City, Savannah, Scranton, Seattle, Springfield, Ill., and Washington, D. C.

The following summary shows the promptness with which the merchants responded in March:

RETAIL PRICE REPORTS RECEIVED DURING MARCH.

Item.	United States.	Geographical division.				
		North Atlantic.	South Atlantic.	North Central.	South Central.	Western.
Percentage of reports received	99.7	100	100	99.7	99.5	99.1
Number of cities in each section from which every report was received	47	14	8	13	7	5

TABLE 6.—PERCENTAGE CHANGES IN THE RETAIL COST OF FOOD IN MARCH, 1922, COMPARED WITH THE COST IN FEBRUARY, 1922, MARCH, 1921, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES.

City.	Percentage increase, March, 1922, compared with year 1913.	Percentage decrease, March, 1922, compared with March, 1921.	Percentage decrease, March, 1922, compared with February, 1922.	City.	Percentage increase, March, 1922, compared with year 1913.	Percentage decrease, March, 1922, compared with March, 1921.	Percentage decrease, March, 1922, compared with February, 1922.
Atlanta	39	11	2	Milwaukee	39	11	2
Baltimore	43	11	3	Minneapolis	38	10	1
Birmingham	42	15	1	Mobile	.....	14	1
Boston	40	11	3	Newark	36	10	3
Bridgeport	.....	13	3	New Haven	37	12	3
Buffalo	44	8	4	New Orleans	42	11	1
Butte	.....	10	2	New York	42	9	3
Charleston	45	12	2	Norfolk	.....	16	2
Chicago	42	10	1	Omaha	38	11	1
Cincinnati	38	12	1	Peoria	.....	11	1
Cleveland	33	12	1	Philadelphia	41	9	3
Columbus	.....	13	1	Pittsburgh	35	13	2
Dallas	37	11	3	Portland, Me	.....	11	3
Denver	26	13	1	Portland, Oreg	26	11	1
Detroit	41	11	3	Providence	43	12	2
Fall River	43	8	3	Richmond	51	9	3
Houston	.....	12	1	Rochester	.....	8	3
Indianapolis	33	12	3	St. Louis	39	11	0.4
Jacksonville	35	11	2	St. Paul	.....	11	1
Kansas City	35	14	1	Salt Lake City	20	15	3
Little Rock	32	11	1	San Francisco	35	9	2
Los Angeles	30	9	3	Savannah	.....	16	3
Louisville	30	11	1	Scranton	47	10	3
Manchester	38	12	4	Seattle	32	8	1
Memphis	34	12	1	Springfield, Ill	.....	11	[1] 0.4
				Washington, D. C.	46	11	3

[1] Increase.

Retail Prices of Coal in the United States.[a]

THE following table shows the average retail prices of coal on March 15, 1921, and on February 15 and March 15, 1922, for the United States and for each of the cities included in the total for the United States. Prices for coal are secured from the cities from which monthly retail prices of food are received.

In addition to the prices for Pennsylvania anthracite, prices are shown for Colorado, Arkansas, and New Mexico anthracite in those cities where these coals form any considerable portion of the sales for household use.

The prices shown for bituminous coal are averages of prices of the several kinds used. The coal dealers in each city are asked to quote prices on the kinds of bituminous coal usually sold for household use.

The prices quoted are for coal delivered to consumers, but do not include charges for storing the coal in cellar or coal bin where an extra handling is necessary.

AVERAGE RETAIL PRICES OF COAL, PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON MAR. 15, 1921, AND FEB. 15 AND MAR. 15, 1922.

City, and kind of coal.	1921	1922	
	Mar. 15.	Feb. 15.	Mar. 15.
United States:			
Pennsylvania anthracite—			
Stove	$15.631	$14.917	$14.888
Chestnut	15.661	14.991	14.939
Bituminous	11.147	9.709	9.719
Atlanta, Ga.:			
Bituminous	8.917	7.481	7.481
Baltimore, Md.:			
Pennsylvania anthracite—			
Stove	[1] 15.500	[1] 15.000	[1] 15.000
Chestnut	[1] 15.500	[1] 14.750	[1] 14.750
Bituminous	[1] 9.583	7.850	7.850
Birmingham, Ala.:			
Bituminous	9.920	6.720	6.510
Boston, Mass.:			
Pennsylvania anthracite—			
Stove	16.000	15.000	15.000
Chestnut	16.000	15.000	15.000
Bridgeport, Conn.:			
Pennsylvania anthracite—			
Stove	16.000	13.000	13.000
Chestnut	16.000	13.000	13.000
Buffalo, N. Y.:			
Pennsylvania anthracite—			
Stove	13.120	12.875	12.813
Chestnut	13.120	12.875	12.413
Butte, Mont.:			
Bituminous	12.492	11.519	11.455
Charleston, S. C.:			
Pennsylvania anthracite—			
Stove	[1] 17.875	[1] 17.000	[1] 17.000
Chestnut	[1] 17.725	[1] 17.100	[1] 17.100
Bituminous	13.250	12.000	12.000
Chicago, Ill.:			
Pennsylvania anthracite—			
Stove	15.280	15.410	15.410
Chestnut	15.520	15.380	15.380
Bituminous	8.988	8.500	8.765
Cincinnati, Ohio:			
Pennsylvania anthracite—			
Stove	15.980	15.000	15.000
Chestnut	16.125	15.000	15.000
Bituminous	7.714	6.667	6.827

[1] Per ton of 2,240 pounds.

[a] Prices of coal were formerly secured semiannually and published in the March and September issues of the MONTHLY LABOR REVIEW. Since June, 1920, these prices have been secured and published monthly.

AVERAGE RETAIL PRICES OF COAL, PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON MAR. 15, 1921, AND FEB. 15 AND MAR. 15, 1922—Continued.

City, and kind of coal.	1921	1922	
	Mar. 15.	Feb. 15.	Mar. 15.
Cleveland, Ohio:			
Pennsylvania anthracite—			
Stove	$14.463	$14.375	$14.375
Chestnut	14.525	14.438	14.375
Bituminous	8.404	8.033	8.019
Columbus, Ohio:			
Pennsylvania anthracite—			
Chestnut	15.000	15.083	15.083
Bituminous	8.429	7.207	7.120
Dallas, Tex.:			
Arkansas anthracite—			
Egg	20.334	18.250	18.250
Bituminous	15.500	15.423	15.462
Denver, Colo.:			
Colorado anthracite—			
Stove, 3 and 5 mixed	17.167	15.917	15.917
Furnace, 1 and 2 mixed	17.167	15.917	15.917
Bituminous	11.456	10.230	10.237
Detroit, Mich.:			
Pennsylvania anthracite—			
Stove	15.550	14.563	14.563
Chestnut	15.550	14.563	14.563
Bituminous	10.444	8.656	8.688
Fall River, Mass.:			
Pennsylvania anthracite—			
Stove	16.000	15.250	15.250
Chestnut	16.000	15.000	15.000
Bituminous	13.000	9.000	9.000
Houston, Tex.:			
Bituminous	15.000	12.000	12.000
Indianapolis, Ind.:			
Pennsylvania anthracite—			
Stove	15.875	15.625	15.500
Chestnut	15.875	15.667	15.667
Bituminous	9.213	7.420	7.295
Jacksonville, Fla.:			
Pennsylvania anthracite—			
Stove	21.500	17.500	17.500
Chestnut	21.000	17.500	17.500
Bituminous	13.667	13.000	13.000
Kansas City, Mo.:			
Arkansas anthracite—			
Furnace	18.083	17.214	17.214
Stove, or No. 4	18.750	18.125	17.875
Bituminous	10.017	8.688	8.672
Little Rock, Ark.:			
Arkansas anthracite—			
Egg	16.000	15.000	15.000
Bituminous	13.412	12.375	12.167
Los Angeles, Calif.:			
Bituminous	19.333	19.000	19.000
Louisville, Ky.:			
Pennsylvania anthracite—			
Stove	16.000	16.750	16.750
Chestnut	17.000	16.750	16.750
Bituminous	8.404	6.769	6.865
Manchester, N. H.:			
Pennsylvania anthracite—			
Stove	17.500	16.000	16.000
Chestnut	17.500	16.000	16.000
Bituminous	12.667	10.500	10.500
Memphis, Tenn.:			
Pennsylvania anthracite—			
Stove	18.000	18.000	18.000
Chestnut	18.000	18.000	18.000
Bituminous	9.500	7.786	7.786
Milwaukee, Wis.:			
Pennsylvania anthracite—			
Stove	16.200	15.980	15.980
Chestnut	16.260	15.950	15.950
Bituminous	10.827	10.357	10.366
Minneapolis, Minn.:			
Pennsylvania anthracite—			
Stove	18.210	17.750	17.750
Chestnut	18.310	17.750	17.750
Bituminous	12.456	11.775	11.913

AVERAGE RETAIL PRICES OF COAL, PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON MAR. 15, 1921, AND FEB. 15 AND MAR. 15, 1922—Continued.

City, and kind of coal.	1921	1922	
	Mar. 15.	Feb. 15.	Mar. 15.
Mobile, Ala.:			
Bituminous	$12.375	$10.063	$9.438
Newark, N. J.:			
Pennsylvania anthracite—			
Stove	13.000	12.833	12.750
Chestnut	13.000	12.833	12.750
New Haven, Conn.:			
Pennsylvania anthracite—			
Stove	15.250	14.000	14.000
Chestnut	15.250	14.000	14.000
New Orleans, La.:			
Pennsylvania anthracite—			
Stove	22.500	17.500	17.000
Chestnut	22.500	17.667	16.833
Bituminous	12.236	10.313	9.688
New York, N. Y.:			
Pennsylvania anthracite—			
Stove	13.883	13.142	13.142
Chestnut	13.900	13.142	13.142
Norfolk, Va.:			
Pennsylvania anthracite—			
Stove	16.000	14.000	14.000
Chestnut	16.000	14.000	14.000
Bituminous	13.143	9.238	9.238
Omaha, Nebr.:			
Pennsylvania anthracite—			
Stove	22.000	22.000	22.000
Chestnut	22.000	22.000	22.000
Bituminous	13.094	11.857	11.857
Peoria, Ill.:			
Pennsylvania anthracite—			
Stove	16.000	15.500	15.500
Chestnut	16.000	15.500	15.500
Bituminous	7.188	6.393	6.464
Philadelphia, Pa.:			
Pennsylvania anthracite—			
Stove	[1] 14.469	[1] 14.094	[1] 14.094
Chestnut	[1] 14.481	[1] 14.094	[1] 14.094
Pittsburgh, Pa.:			
Pennsylvania anthracite—			
Stove	[1] 16.000	[1] 15.750	[1] 15.750
Chestnut	[1] 16.500	[1] 15.667	[1] 15.667
Bituminous	8.031	6.781	6.750
Portland, Me.:			
Pennsylvania anthracite—			
Stove	16.320	15.843	15.843
Chestnut	16.320	15.843	15.843
Bituminous	10.860	.....	.....
Portland, Oreg.:			
Bituminous	13.871	13.013	12.999
Providence, R. I.:			
Pennsylvania anthracite—			
Stove	[2] 16.000	[2] 15.000	[2] 15.000
Chestnut	[2] 16.000	[2] 15.000	15.000
Bituminous	[2] 11.333	.....	.....
Richmond, Va.:			
Pennsylvania anthracite—			
Stove	14.500	14.250	14.250
Chestnut	14.500	14.250	14.250
Bituminous	11.645	9.846	9.846
Rochester, N. Y.:			
Pennsylvania anthracite—			
Stove	13.550	13.450	13.450
Chestnut	13.550	13.450	13.450
St. Louis, Mo.:			
Pennsylvania anthracite—			
Stove	17.125	15.938	15.938
Chestnut	17.125	16.125	16.125
Bituminous	7.566	6.908	6.868
St. Paul, Minn.:			
Pennsylvania anthracite—			
Stove	18.250	17.750	17.750
Chestnut	18.300	17.750	17.750
Bituminous	13.769	12.129	12.172

[1] Per ton of 2,240 pounds.

[2] 50 cents per ton additional is charged for "binning." Most customers require binning or basketing the coal into the cellar.

AVERAGE RETAIL PRICES OF COAL, PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON MAR. 15, 1921, AND FEB. 15 AND MAR. 15, 1922—Concluded.

City, and kind of coal.	1921	1922	
	Mar. 15.	Feb. 15.	Mar. 15.
Salt Lake City, Utah.:			
Colorado anthracite—			
Furnace, 1 and 2 mixed	$17.800	$19.125	$19.125
Stove, 3 and 5 mixed	18.900	20.000	20.000
Bituminous	9.857	9.000	8.978
San Francisco, Calif.:			
New Mexico anthracite—			
Cerillos egg	28.650	27.250	27.250
Colorado anthracite—			
Egg	26.750	26.250	26.250
Bituminous	19.455	19.250	19.250
Savannah, Ga.:			
Pennsylvania anthracite—			
Stove	[3] 19.100	[3] 17.100	[3] 16.600
Chestnut	[3] 19.100	[3] 17.100	[3] 16.600
Bituminous	[3] 14.700	[3] 12.267	[3] 12.267
Scranton, Pa.:			
Pennsylvania anthracite—			
Stove	9.667	9.700	9.700
Chestnut	9.667	9.700	9.700
Seattle, Wash.:			
Bituminous	[2] 11.584	[2] 10.107	[2] 10.107
Springfield, Ill.:			
Bituminous	4.850	4.450	4.575
Washington, D. C.:			
Pennsylvania anthracite—			
Stove	[1] 15.143	[1] 14.814	[1] 14.643
Chestnut	[1] 15.121	[1] 14.621	[1] 14.571
Bituminous	[1] 10.982	[1] 9.112	[1] 9.073

[1] Per ton of 2,240 pounds.
[2] Prices in zone A. The cartage charge in zone A is $1.75, which has been included in the average. The cartage charges in Seattle range from $1.75 to $2.80, according to distance.
[3] All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above prices.

Retail Prices of Gas in the United States.[a]

THE following table shows for 51 cities the net price for the first 1,000 cubic feet of gas used for household purposes. Prices are, in most cases, for manufactured gas, but prices for natural gas have also been quoted for those cities where it is in general use. For Los Angeles prices are given for natural and manufactured gas, mixed. The prices shown do not include any extra charge for service.

NET PRICE FOR THE FIRST 1,000 CUBIC FEET OF GAS FOR HOUSEHOLD USE ON APR. 15 OF EACH YEAR, 1913 TO 1920, AND ON MAY 15, SEPT. 15 AND DEC. 15, 1921, AND MAR. 15, 1922, BY CITIES.

Manufactured gas.

City.	Apr. 15, 1913.	Apr. 15, 1914.	Apr. 15, 1915.	Apr. 15, 1916.	Apr. 15, 1917.	Apr. 15, 1918.	Apr. 15, 1919.	Apr. 15, 1920.	May 15, 1921.	Sept. 15, 1921.	Dec. 15, 1921.	Mar 15, 1922.
Atlanta, Ga.	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.15	$1.15	$1.90	$1.65	$1.65	$1.65
Baltimore, Md.	.90	.80	.80	.75	.75	.75	.75	.75	.75	.92	.92	.92
Birmingham, Ala.	1.00	.95	.95	.95	.95	.95	.95	.95	.88	.88	.88	.88
Boston, Mass.	.82	.82	.80	.80	.80	.85	1.02	1.07	1.42	1.35	1.34	1.34
Bridgeport, Conn.	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	[1] 1.30	1.60	1.60	1.60

[1] Plus 50 cents per month service charge.
[a] Retail prices of gas have heretofore been secured in April of each year and published in the June issues of the MONTHLY LABOR REVIEW. For 1921, prices on gas have been secured in May, September, and December and published in the July and November, 1921, issues, and in the February, 1922, issue of the MONTHLY LABOR REVIEW.

NET PRICE FOR THE FIRST 1,000 CUBIC FEET OF GAS FOR HOUSEHOLD USE ON APR. 15 OF EACH YEAR, 1913 TO 1920, AND ON MAY 15, SEPT. 15, AND DEC. 15, 1921, AND MAR. 15, 1922, BY CITIES—Concluded.

City.	Apr. 15, 1913.	Apr. 15, 1914.	Apr. 15, 1915.	Apr. 15, 1916.	Apr. 15, 1917.	Apr. 15, 1918.	Apr. 15, 1919.	Apr. 15, 1920.	May 15, 1921.	Sept. 15, 1921.	Dec. 15, 1921.	Mar. 15, 1922.
Buffalo, N. Y.	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.45	$1.45	$1.45	$1.45	$1.45	$1.45
Butte, Mont.	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	2.10	2.10	2.10	2.10
Charleston, S. C.	1.10	1.10	1.10	1.10	1.00	1.10	1.10	1.25	1.55	1.55	1.55	1.55
Chicago, Ill.	.80	.80	.80	.80	.80	.755	.94	.90	1.29	1.29	1.29	1.00
Cleveland, Ohio.	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80
Denver, Colo.	.85	.80	.80	.80	.80	.85	.95	.95	.95	.95	.95	.95
Detroit, Mich.	.75	.75	.75	.75	.75	.75	.79	.79	.85	.85	.85	.79
Fall River, Mass.	.80	.80	.80	.80	.80	.95	.95	1.05	1.25	1.15	1.15	1.15
Houston, Tex.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.09	1.09	1.09	1.09
Indianapolis, Ind.	.60	.55	.55	.55	.55	.55	.60	.60	.90	.90	.90	.90
Jacksonville, Fla.	1.20	1.20	1.15	1.15	1.15	1.25	1.25	1.50	1.75	1.75	1.75	1.75
Manchester, N. H.	1.10	1.10	1.00	1.00	1.00	1.00	1.10	1.10	[2] 1.50	[2] 1.50	[2] 1.50	[2] 1.40
Memphis, Tenn.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	[1] 1.10	1.35	1.35	1.35	1.35
Milwaukee, Wis.	.75	.75	.75	.75	.75	.75	.75	.75	.90	.90	.90	.90
Minneapolis, Minn.	.85	.80	.80	.77	.77	.77	.95	.95	1.28	1.11	1.11	1.02
Mobile, Ala.	1.10	1.10	1.10	1.10	1.10	1.10	1.35	1.35	1.80	1.80	1.80	1.80
Newark, N. J.	1.00	.90	.90	.90	.90	.97	.97	1.15	1.40	1.40	1.40	1.40
New Haven, Conn.	.90	.90	.90	.90	.90	1.00	1.10	1.10	[1] 1.10	[1] 1.10	[1] 1.10	[1] 1.10
New Orleans, La.	1.10	1.00	1.00	1.00	1.00	1.00	1.30	1.30	1.30	1.45	1.45	1.45
New York, N. Y.	.84	.84	.83	.83	.83	.83	.85	.87	1.35	1.27	1.25	1.25
Norfolk, Va.	1.00	1.00	1.00	1.00	1.00	1.20	1.20	1.60	1.40	1.35	1.35	1.45
Omaha, Nebr.	1.15	1.15	1.15	1.00	1.00	1.15	1.15	1.15	1.53	1.45	1.45	1.40
Peoria, Ill.	.90	.90	.90	.90	.85	.85	.85	.85	1.20	1.20	1.20	1.20
Philadelphia, Pa.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pittsburgh, Pa.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	(3)	(3)	(3)	(3)	(3)
Portland, Me.	1.10	1.00	1.00	1.00	1.00	1.00	1.40	1.40	1.85	1.85	1.75	1.75
Portland, Oreg.	.95	.95	.95	.95	.95	.95	.95	.95	1.67	1.50	1.50	1.50
Providence, R. I.	.85	.85	.85	.85	.85	1.00	1.30	1.30	[1] 1.25	[1] 1.25	[1] 1.25	[1] 1.25
Richmond, Va.	.90	.90	.90	.80	.80	.80	1.00	1.00	1.30	1.30	1.30	1.30
Rochester, N. Y.	.95	.95	.95	.95	.95	.95	.95	.95	[4] 1.05	[4] 1.05	1.10	1.10
St. Louis, Mo.	.80	.80	.80	.80	.75	.75	.75	.85	1.05	1.05	1.05	1.05
St. Paul, Minn.	.95	.90	.90	.85	.85	.85	.85	.85	1.00	1.00	1.00	1.00
Salt Lake City, Utah.	.90	.90	.90	.90	.90	.90	1.10	[1] 1.30	[2] 1.52	[2] 1.52	[2] 1.52	[2] 1.52
San Francisco, Calif.	.75	.85	.85	.85	.85	.85	.90	.95	1.05	1.04	1.04	1.04
Savannah, Ga.	.....	.....	.....	.....	.....	.....	.....	1.25	1.60	1.60	1.60	1.60
Scranton, Pa.	.95	.95	.95	.95	.95	1.15	1.30	1.30	1.70	1.70	1.70	1.70
Seattle, Wash.	1.00	1.00	1.00	1.00	1.00	1.25	1.25	1.55	1.55	1.55	1.55	1.50
Springfield, Ill.	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.40	1.40	1.40	1.40
Washington, D. C.	.93	.93	.93	.93	.80	.90	.95	.95	1.25	1.25	1.10	1.10

Natural gas.

City.	Apr. 15, 1913.	Apr. 15, 1914.	Apr. 15, 1915.	Apr. 15, 1916.	Apr. 15, 1917.	Apr. 15, 1918.	Apr. 15, 1919.	Apr. 15, 1920.	May 15, 1921.	Sept. 15, 1921.	Dec. 15, 1921.	Mar. 15, 1922.
Buffalo, N. Y.	$0.30	$0.30	$0.30	$0.30	$0.30	$0.30	$0.35	$0.35	$0.35	$0.40	$0.40	$0.42
Cincinnati, Ohio.	.30	.30	.30	.30	.30	.35	.35	.35	.35	.35	.50	.50
Cleveland, Ohio.	.30	.30	.30	.30	.30	.30	.35	.35	.35	.35	.45	.40
Columbus, Ohio.	.....	.....	.....	.....	.30	.30	.30	.30	.30	.45	.45	.45
Dallas, Tex.	.45	.45	.45	.45	.45	.45	.45	.45	.67½	.67½	.67½	.67½
Kansas City, Mo.	.27	.27	.27	.27	.30	.60	.80	.80	[1] .80	[1] .80	[1] .80	[1] .80
Little Rock, Ark.	.40	.40	.40	.40	.40	.40	.45	.45	.45	.45	.45	.45
Louisville, Ky.	.....	.62	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65
Pittsburgh, Pa.	.28	.28	.28	.28	.28	.28	.35	.35	.45	.45	.50	.50

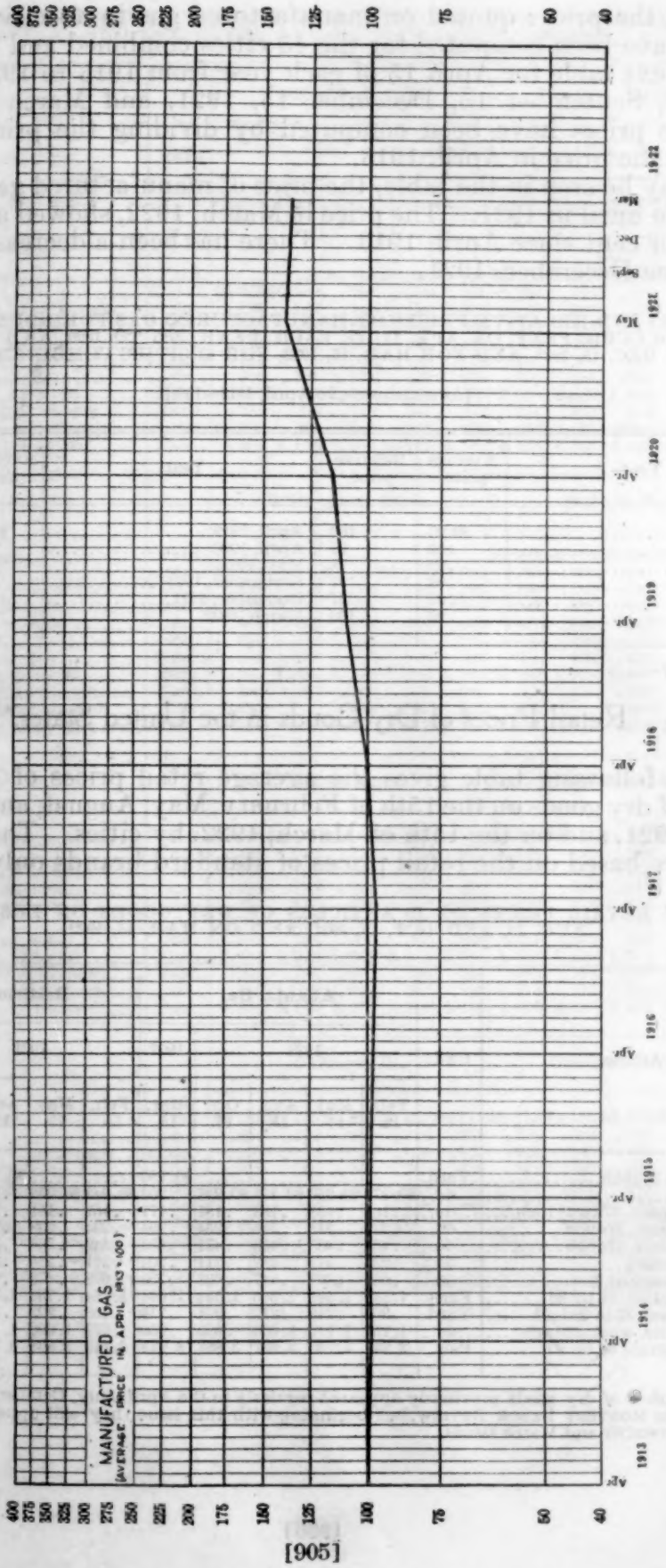
Manufactured and natural gas, mixed.

Los Angeles, Calif.	.....	.....	$0.68	$0.68	$0.68	$0.68	$0.75	$0.75	$0.75	$0.76	$0.76	$0.76

[1] Plus 50 cents per month service charge.
[2] Plus 25 cents per month service charge.
[3] Sale of manufactured gas discontinued.
[4] Plus 40 cents per month service charge.

From the prices quoted on manufactured gas in 43 cities

TREND IN RETAIL PRICE OF GAS FOR THE UNITED STATES, APRIL, 1913, TO MARCH, 1922.



[905]

From the prices quoted on manufactured gas in 43 cities average prices have been computed for the 43 cities combined and are shown in the next table for April 15 of each year from 1913 to 1920 and for May 15, September 15, December 15, 1921, and March 15, 1922. Relative prices have been computed by dividing the price of each year by the price in April, 1913.

As may be seen in the table, the price of manufactured gas changed but little until in 1921. The price in March, 1922, showed an increase of 36 per cent since April, 1913. There has been a decrease of 1 per cent since December, 1921.

AVERAGE [1] AND RELATIVE PRICES OF MANUFACTURED GAS FOR HOUSEHOLD USE PER 1,000 CUBIC FEET, ON APR. 15 OF EACH YEAR, 1913 TO 1920, AND ON MAY 15, SEPT. 15, DEC. 15, 1921, AND FOR MAR. 15, 1922, FOR 43 CITIES COMBINED.

[Average prices in April, 1913=100.]

Year.	Average price.	Relative price.	Year.	Average price.	Relative price.
April, 1913	$0.95	100	April, 1919	$1.04	109
April, 1914	.94	99	April, 1920	1.09	115
April, 1915	.93	98	May, 1921	1.32	139
April, 1916	.92	97	September, 1921	1.31	138
April, 1917	.92	97	December, 1921	1.30	137
April, 1918	.95	100	March, 1922	1.29	136

[1] Net price.

Retail Prices of Dry Goods in the United States.[a]

THE following table gives the average retail prices of 10 articles of dry goods on the 15th of February, May, August, and October, 1921, and on the 15th of March, 1922, by cities. The averages given are based on the retail prices of standard brands only.

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON FEB. 15, MAY 15, AUG. 15, AND OCT. 15, 1921, AND ON MAR. 15, 1922.

Article.	Unit.	Atlanta, Ga.					Baltimore, Md.				
		1921				1922	1921				1922
		Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.
Calico, 24 to 25 inch	Yard.					$0.150			$0.200	$0.217	$0.217
Percale	...do..	$0.275	$0.250	$0.251	$0.257	.263	$0.243	$0.238	.238	.238	.235
Gingham, apron, 27 to 28 inch	...do..	.161	.158	.183	.181	.171	.161	.161	.147	.149	.158
Gingham, dress, 27-inch	...do..	.238	.245	.246	.254	.254	.234	.238	.241	.241	.243
Gingham, dress, 32-inch	...do..	.464	.483	.453	.471	.459	.349	.368	.365	.375	.376
Muslin, bleached	...do..	.222	.214	.187	.211	.204	.211	.216	.208	.225	.226
Sheeting, bleached, 9-4	...do..	.662	.668	.647	.693	.735	.673	.673	.649	.748	.739
Sheets, bleached, 81 by 90	Each.	1.599	1.591	1.583	1.594	1.646	1.754	1.736	1.707	1.762	1.718
Outing flannel, 27 to 28 inch	Yard.	.265	.248	.212	.221	.218	.252	.223	.219	.223	.223
Flannel, white, wool, 27-inch	...do..	1.250	1.117	1.000	.950	.950	1.077	1.080	1.140	1.008	1.000
Blankets, cotton, 66 by 80	Pair..	3.240	4.740	3.937	3.868	3.913	6.113	5.894	4.711	4.479	4.131

[a] Retail prices of dry goods previously appeared regularly in the April, July, October, and December issues of the MONTHLY LABOR REVIEW, but beginning with this issue they will appear in the May, August, November and March issues.

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON FEB. 15, MAY 15, AUG. 15, AND OCT. 15, 1921, AND ON MAR. 15, 1922—Continued.

Article.	Unit.	Birmingham, Ala.					Boston, Mass.				
		1921				1922	1921				1922
		Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.
Calico, 24 to 25 inch	Yard.	.....	.....	$0.125	$0.093	$0.100	$0.150	$0.150	$0.150	$0.150	$0.142
Percale	...do..	$0.258	$0.250	.250	.256	.261	.266	.246	.241	.252	.257
Gingham, apron, 27 to 28 inch	...do..	.175	.148	.140	.154	.161	.178	.206	.162	.172	.173
Gingham, dress, 27-inch	...do..	.251	.249	.242	.243	.246	.240	.248	.245	.245	.239
Gingham, dress, 32-inch	...do..	.413	.419	.454	.503	.490	.504	.499	.521	.559	.490
Muslin, bleached	...do..	.194	.175	.166	.185	.177	.262	.238	.244	.258	.249
Sheeting, bleached, 9–4	...do..	.604	.591	.558	.629	.639	.666	.659	.661	.680	.681
Sheets, bleached, 81 by 90	Each.	1.517	1.469	1.395	1.550	1.469	1.663	1.693	1.619	1.664	1.659
Outing flannel, 27 to 28 inch	Yard.	.245	.205	.210	.207	.202	.251	.259	.249	.240	.211
Flannel, white, wool, 27-inch	...do..	1.096	.974	.980	.930	.868	.998	.891	.891	.927	.880
Blankets, cotton, 66 by 80	Pair..	4.804	4.154	4.066	4.143	4.183	4.735	4.368	4.483	4.588	4.000

Article.	Unit.	Bridgeport, Conn.					Buffalo, N. Y.				
		1921				1922	1921				1922
		Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.
Calico, 24 to 25 inch	Yard.	.....	.....	.....	.....	.....	$0.113	$0.119	$0.106	$0.110	$0.106
Percale	...do..	$0.278	$0.255	$0.245	$0.248	$0.246	.285	.259	.262	.257	.263
Gingham, apron, 27 to 28 inch	...do..	.185	.182	.170	.166	.170	.196	.160	.158	.163	.181
Gingham, dress, 27-inch	...do..	.253	.237	.230	.242	.260	.242	.257	.280	.267	.266
Gingham, dress, 32-inch	...do..	.488	.488	.474	.488	.496	.491	.522	.506	.522	.533
Muslin, bleached	...do..	.241	.208	.200	.221	.223	.258	.226	.216	.221	.229
Sheeting, bleached, 9–4	...do..	.660	.677	.677	.673	.709	.681	.689	.676	.705	.708
Sheets, bleached, 81 by 90	Each.	1.855	1.855	1.741	1.774	1.786	1.789	1.718	1.702	1.668	1.739
Outing flannel, 27 to 28 inch	Yard.	.300	.252	.225	.225	.238	.297	.231	.228	.226	.212
Flannel, white, wool, 27-inch	...do.	1.250	.....	.700	.700	.750	.865	.....	.850	.865	.865
Blankets, cotton, 66 by 80	Pair..	6.050	5.850	5.000	5.063	5.042	5.530	5.416	5.384	5.210	4.796

Article.	Unit.	Butte, Mont.					Charleston, S. C.				
		1921				1922	1921				1922
		Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.
Calico, 24 to 25 inch	Yard.	$0.150	$0.150	$0.150	$0.133	$0.133	$0.133	$0.131	$0.113	$0.113	$0.119
Percale	...do..	.334	.310	.258	.260	.263	.265	.244	.239	.233	.238
Gingham, apron, 27 to 28 inch	...do..	.214	.188	.180	.154	.170	.164	.153	.153	.158	.153
Gingham, dress, 27-inch	...do..	.300	.270	.248	.248	.261	.232	.217	.218	.222	.247
Gingham, dress, 32-inch	...do..	.478	.471	.478	.438	.438	.420	.373	.376	.410	.415
Muslin, bleached	...do..	.244	.244	.228	.244	.241	.223	.194	.193	.201	.203
Sheeting, bleached, 9–4	...do..	.842	.788	.767	.797	.803	.614	.602	.588	.590	.664
Sheets, bleached, 81 by 90	Each.	2.113	1.992	1.933	2.044	2.044	1.553	1.539	1.511	1.544	1.685
Outing flannel, 27 to 28 inch	Yard.	.308	.286	.272	.266	.264	.262	.218	.197	.198	.208
Flannel, white, wool, 27-inch	...do..	.950	1.013	1.013	.932	.890	1.073	.713	.725	.758	.760
Blankets, cotton, 66 by 80	Pair..	4.875	5.190	5.270	5.270	5.130	4.060	4.135	3.655	3.572	3.880

Article.	Unit.	Chicago, Ill.					Cincinnati, Ohio.				
		1921				1922	1921				1922
		Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.
Calico, 24 to 25 inch	Yard.	$0.132	$0.126	$0.129	$0.137	$0.117	$0.173	$0.150	$0.150	$0.150	$0.129
Percale	...do..	.284	.279	.250	.246	.231	.276	.268	.245	.254	.246
Gingham, apron, 27 to 28 inch	...do..	.159	.142	.143	.157	.157	.165	.145	.139	.144	.149
Gingham, dress, 27-inch	...do..	.255	.245	.245	.241	.236	.244	.242	.252	.237	.237
Gingham, dress, 32-inch	...do..	.579	.559	.592	.565	.537	.574	.561	.549	.525	.511
Muslin, bleached	...do..	.228	.208	.214	.226	.203	.213	.208	.195	.201	.198
Sheeting, bleached, 9–4	...do..	.637	.641	.649	.711	.672	.643	.639	.629	.654	.625
Sheets, bleached, 81 by 90	Each.	1.530	1.569	1.566	1.654	1.643	1.604	1.617	1.550	1.695	1.667
Outing flannel, 27 to 28 inch	Yard.	.236	.200	.209	.198	.189	.237	.215	.209	.206	.202
Flannel, white, wool, 27-inch	...do.	1.100	.950	.892	.896	1.420	1.250	.983	.873	.910	.926
Blankets, cotton, 66 by 80	Pair..	5.098	4.986	4.628	4.607	4.772	4.920	4.771	4.211	3.979	3.903

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON FEB. 15, MAY 15, AUG. 15, AND OCT. 15, 1921, AND ON MAR. 15, 1922—Continued.

Article.	Unit.	Cleveland, Ohio.					Columbus, Ohio.				
		1921				1922	1921				1922
		Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.
Calico, 24 to 25 inch	Yard.	.....	$0.125	$0.125	$0.131	$0.133	$0.145	$0.141	$0.132	$0.146	$0.148
Percale	...do..	$0.276	.249	.263	.259	.259	.267	.251	.250	.244	.246
Gingham, apron, 27 to 28 inch	...do..	.175	.174	.140	.157	.167	.163	.176	.164	.170	.169
Gingham, dress, 27-inch	...do..	.238	.229	.243	.247	.242	.275	.279	.280	.276	.281
Gingham, dress, 32-inch	...do..	.528	.508	.516	.538	.553	.593	.584	.570	.583	.581
Muslin, bleached	...do..	.252	.238	.229	.244	.239	.222	.209	.190	.210	.215
Sheeting, bleached, 9-4	...do..	.676	.696	.666	.676	.682	.763	.709	.699	.639	.750
Sheets, bleached, 81 by 90	Each.	1.558	1.523	1.525	1.613	1.675	1.743	1.777	1.709	1.715	1.785
Outing flannel, 27 to 28 inch	Yard.	.234	.204	.205	.203	.229	.290	.250	.218	.228	.234
Flannel, white, wool, 27-inch	...do..	1.250	1.000	1.000	1.117	.983	.....	.....	.....	1.250	1.250
Blankets, cotton, 66 by 80	Pair..	5.420	4.779	4.529	4.756	4.550	4.749	4.711	4.564	4.747	4.089

Article.	Unit.	Dallas, Tex.					Denver, Colo.				
Calico, 24 to 25 inch	Yard.	$0.125	$0.125	$0.100	$0.100	00.100	$0.175	$0.145	$0.134	$0.140	$0.167
Percale	...do..	.270	.246	.233	.219	.219	.348	.321	.304	.293	.298
Gingham, apron, 27 to 28 inch	...do..	.174	.143	.143	.152	.162	.179	.170	.160	.165	.168
Gingham, dress, 27-inch	...do..	.247	.225	.225	.228	.237	.264	.242	.249	.246	.258
Gingham, dress, 32-inch	...do..	.516	.542	.513	.495	.497	.626	.565	.571	.571	.535
Muslin, bleached	...do..	.209	.187	.195	.207	.206	.245	.239	.234	.228	.221
Sheeting, bleached, 9-4	...do..	.593	.570	.559	.634	.627	.716	.754	.740	.767	.768
Sheets, bleached, 81 by 90	Each.	1.529	1.514	1.443	1.483	1.561	1.823	1.922	1.862	1.871	1.754
Outing flannel, 27 to 28 inch	Yard.	.194	.184	.196	.187	.188	.271	.218	.212	.215	.218
Flannel, white, wool, 27-inch	...do..	.....	.....	.650	.850	.....	.....	1.425	1.050	1.125	.979
Blankets, cotton, 66 by 80	Pair..	4.156	4.350	4.706	4.583	4.522	5.396	5.646	5.542	5.458	4.854

Article.	Unit.	Detroit, Mich.					Fall River, Mass.				
Calico, 24 to 25 inch	Yard.	$0.136	$0.136	$0.136	$0.136	$0.129	.....	.....	.....	.....	.....
Percale	...do..	.282	.282	.262	.270	.264	$0.238	$0.246	$0.246	$0 246	$0.258
Gingham, apron, 27 to 28 inch	...do..	.190	.181	.172	.174	.172	.167	.145	.143	.151	.158
Gingham, dress, 27-inch	...do..	.225	.219	.220	.216	.223	.240	.238	.243	.270	.283
Gingham, dress, 32-inch	...do..	.574	.520	.489	.501	.510	.390	.402	.460	.450	.443
Muslin, bleached	...do..	.225	.220	.209	.217	.223	.230	.203	.221	.226	.223
Sheeting, bleached, 9-4	...do..	.715	.693	.698	.731	.733	.783	.688	.697	.708	.720
Sheets, bleached, 81 by 90	Each.	1.727	1.770	1.765	1.862	1.751	1.610	1.690	1.680	1.683	1.710
Outing flannel, 27 to 28 inch	Yard.	.263	.247	.229	.221	.220	258	.254	.236	.228	.228
Flannel, white, wool, 27-inch	...do..	1.233	1.233	1.233	1.233	1.233	.....	.....	.690	.625	.....
Blankets, cotton, 66 by 80	Pair..	5.013	4.708	4.623	4.498	4.270	4.320	3.555	4.944	4.788	4.406

Article.	Unit.	Houston, Tex.					Indianapolis, Ind.				
Calico, 24 to 25 inch	Yard.	$0.125	$0.123	$0.123	$0.130	$0.122	$0.140	$0.128	$0.123	$0.132	$0.126
Percale	...do..	.280	.282	.262	.280	.268	.295	.285	.275	.275	.277
Gingham, apron, 27 to 28 inch	...do..	.163	.158	.168	.190	.172	.171	.164	.165	.177	.168
Gingham, dress, 27-inch	...do..	.220	.204	.199	.208	.210	.249	.242	.263	.263	.260
Gingham, dress, 32-inch	...do..	.497	.523	.515	.507	.505	.410	.381	.456	.445	.532
Muslin, bleached	...do..	.209	.173	.176	.181	.188	.238	.220	.215	.224	.208
Sheeting, bleached, 9-4	...do..	.588	.518	.565	.580	.579	.698	.671	.683	.694	.693
Sheets, bleached, 81 by 90	Each.	1.654	1.528	1.507	1.510	1.613	1.527	1.571	1.523	1.620	1.611
Outing flannel, 27 to 28 inch	Yard.	.203	.188	.170	.183	.182	.254	.226	.198	.205	.200
Flannel, white, wool, 27-inch	...do..	.804	.723	.723	.723	.762	.997	.997	.997	1.047	1.023
Blankets, cotton, 66 by 80	Pair..	5.932	4.983	3.943	4.270	4.270	4.905	4.503	4.808	4.941	4.628

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON FEB. 15,

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON FEB. 15, MAY 15, AUG. 15, AND OCT. 15, 1921, AND ON MAR. 15, 1922—Continued.

Article.	Unit.	Jacksonville, Fla.					Kansas City, Mo.				
		1921				1922	1921				1922
		Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.
Calico, 24 to 25 inch	Yard.	$0.138	$0.144	$0.144	$0.144	$0.144	$0.161	$0.149	$0.138	$0.153	$0.144
Percale	...do..	.300	.270	.290	.290	.270	.284	.260	.251	.273	.270
Gingham, apron, 27 to 28 inch	...do..	.160	.170	.170	.170	.170	.190	.181	.189	.183	.206
Gingham, dress, 27-inch	...do..	.233	.243	.243	.234	.240	.270	.267	.273	.270	.270
Gingham, dress, 32-inch	...do..	.438	.446	.540	.521	.465	.555	.534	.522	.487	.487
Muslin, bleached	...do..	.229	.216	.204	.216	.215	.241	.204	.225	.232	.229
Sheeting, bleached, 9-4	...do..	.688	.642	.608	.588	.670	.705	.699	.660	.715	.743
Sheets, bleached, 81 by 90	Each.	1.615	1.482	1.444	1.512	1.498	1.712	1.675	1.519	1.644	1.612
Outing flannel, 27 to 28 inch	Yard.	.270	.210	.206	.218	.220	.243	.223	.203	.221	.222
Flannel, white, wool, 27-inch	...do..	.850	.850	.850	.850	.....	.750	.750	.920	.920	.850
Blankets cotton, 66 by 80	Pair..	5.317	.....	4.250	4.186	4.186	5.431	4.969	4.810	4.994	4.997

Article.	Unit.	Little Rock, Ark.					Los Angeles, Calif.				
Calico, 24 to 25 inch	Yard.	$0.200	$0.133	$0.140	$0.153	$0.113	$0.150	$0.125	$0.125	$0.125	$0.163
Percale	...do..	.276	.261	.230	.237	.235	.353	.317	.280	.282	.297
Gingham, apron, 27 to 28 inch	...do..	.188	.156	.163	.163	.150	.186	.185	.178	.178	.172
Gingham, dress, 27-inch	...do..	.215	.208	.236	.235	.231	.274	.251	.254	.251	.257
Gingham, dress, 32-inch	...do..	.409	.399	.433	.427	.451	.584	.557	.518	.544	.556
Muslin, bleached	...do..	.221	.200	.198	.199	.183	.247	.230	.217	.223	.226
Sheeting, bleached, 9-4	...do..	.664	.583	.567	.610	.687	.713	.666	.688	.723	.744
Sheets, bleached, 81 by 90	Each.	1.700	1.543	1.484	1.522	1.646	1.623	1.586	1.596	1.618	1.662
Outing flannel, 27 to 28 inch	Yard.	.238	.197	.206	.203	.178	.269	.255	.246	.245	.239
Flannel, white, wool, 27-inch	...do..	.911	.771	.886	.875	.894	.950	1.317	1.317	1.200	1.250
Blankets, cotton, 66 by 80	Pair..	4.175	3.875	3.895	4.095	3.676	5.106	4.633	4.342	4.581	4.443

Article.	Unit.	Louisville, Ky.					Manchester, N. H.				
Calico, 24 to 25 inch	Yard.	$0.134	$0.129	$0.125	$0.128	$0.122	$0.130	$0.129	$0.128	$0.133	$0.133
Percale	...do..	.261	.246	.257	.257	.257	.261	.233	.229	.241	.220
Gingham, apron, 27 to 28 inch	...do..	.156	.159	.143	.158	.163	.156	.163	.163	.167	.167
Gingham, dress, 27-inch	...do..	.269	.261	.260	.264	.252	.233	.222	.221	.222	.224
Gingham, dress, 32-inch	...do..	.532	.550	.539	.521	.454	.450	.439	.427	.413	.456
Muslin, bleached	...do..	.194	.189	.199	.214	.198	.236	.226	.224	.230	.225
Sheeting, bleached, 9-4	...do.	.635	.609	.616	.686	.675	.719	.633	.627	.668	.644
Sheets, bleached, 81 by 90	Each.	1.932	1.604	1.608	1.625	1.620	1.625	1.636	1.634	1.681	1.656
Outing flannel, 27 to 28 inch	Yard.	.257	.220	.228	.244	.240	.230	.240	.228	.230	.223
Flannel, white, wool, 27-inch	...do..	.875	.670	.750	.770	.807	1.250	.885	.840	.843	.864
Blankets, cotton, 66 by 80	Pair..	5.917	5.000	4.980	4.265	3.787	4.302	4.009	4.472	4.351	4.083

Article.	Unit.	Memphis, Tenn.					Milwaukee, Wis.				
Calico, 24 to 25 inch	Yard.	$0.144	$0.153	$0.121	$0.133	$0.132	$0.155	$0.122	$0.130	$0.132	$0.132
Percale	...do..	.301	.295	.255	.275	.252	.260	.260	.258	.265	.258
Gingham, apron, 27 to 28 inch	...do..	.150	.146	.146	.161	.159	.176	.173	.173	.184	.176
Gingham, dress, 27-inch	...do..	.266	.250	.251	.269	.251	.258	.243	.242	.243	.241
Gingham, dress, 32-inch	...do..	.545	.548	.524	.533	.518	.519	.502	.514	.516	.473
Muslin, bleached	...do..	.204	.203	.201	.199	.203	.263	.219	.219	.236	.232
Sheeting, bleached, 9-4	...do..	.552	.659	.651	.712	.672	.664	.681	.650	.705	.708
Sheets, bleached, 81 by 90	Each.	1.627	1.635	1.611	1.689	1.740	1.734	1.760	1.744	1.706	1.763
Outing flannel, 27 to 28 inch	Yard.	.209	.191	.190	.202	.190	.280	.201	.193	.209	.224
Flannel, white, wool, 27-inch	...do..	.875	.875	.875	.917	.870	.....	.850	.850	1.000	1.000
Blankets, cotton, 66 by 80	Pair..	4.857	4.945	4.900	4.546	4.506	5.032	4.368	4.533	4.463	4.411

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON FEB. 15, MAY 15, AUG. 15, AND OCT. 15, 1921, AND ON MAR. 15, 1922—Continued.

Article.	Unit.	Minneapolis, Minn.					Mobile, Ala.				
		1921				1922	1921				1922
		Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.
Calico, 24 to 25 inch	Yard.	$0.132	$0.130	$0.111	$0.111	$0.107	$0.150	$0.150	$0.144	$0.144	$0.148
Percale	do.	.242	.244	.262	.258	.267	.244	.256	.239	.244	.239
Gingham, apron, 27 to 28 inch	do.	.169	.165	.165	.160	.162	.158	.150	.145	.150	.150
Gingham, dress, 27-inch	do.	.264	.265	.254	.258	.258	.221	.220	.209	.209	.212
Gingham, dress, 32-inch	do.	.618	.671	.551	.562	.543	.398	.476	.415	.410	.421
Muslin, bleached	do.	.233	.228	.229	.225	.226	.219	.213	.197	.199	.198
Sheeting, bleached, 9–4	do.	.624	.622	.614	.634	.666	.590	.620	.620	.595	.568
Sheets, bleached, 81 by 90	Each.	1.639	1.682	1.639	1.681	1.741	1.570	1.570	1.461	1.504	1.517
Outing flannel, 27 to 28 inch	Yard.	.220	.198	.203	.211	.206	.226	.225	.193	.193	.188
Flannel, white, wool, 27-inch	do.	.....	.720	1.115	.916	.948	.590	.763	.857	.897	.890
Blankets, cotton, 66 by 80	Pair.	5.098	4.992	4.634	4.457	4.509	4.979	4.858	4.841	5.000	4.428

Article.	Unit.	Newark, N. J.					New Haven, Conn.				
Calico, 24 to 25 inch	Yard.	$0.125	$0.100	$0.104	$0.100	$0.100	$0.144	$0.136	$0.125	$0.125	$0.125
Percale	do.	.303	.277	.283	.277	.277	.255	.236	.239	.245	.248
Gingham, apron, 27 to 28 inch	do.	.183	.163	.150	.150	.150	.177	.168	.154	.157	.159
Gingham, dress, 27-inch	do.	.243	.236	.234	.248	.241	.263	.240	.235	.239	.239
Gingham, dress, 32-inch	do.	.508	.504	.500	.494	.554	.459	.439	.499	.476	.498
Muslin, bleached	do.	.219	.218	.203	.209	.231	.221	.210	.211	.219	.222
Sheeting, bleached, 9–4	do.	.670	.670	.665	.665	.745	.675	.647	.634	.646	.671
Sheets, bleached, 81 by 90	Each.	1.809	1.769	1.769	1.786	1.824	1.552	1.512	1.518	1.525	1.608
Outing flannel, 27 to 28 inch	Yard.	.245	.228	.218	.221	.222	.263	.213	.211	.212	.219
Flannel, white, wool, 27-inch	do.	1.140	1.068	1.053	1.053	1.020	.810	.838	.800	.875	.875
Blankets, cotton, 66 by 80	Pair.	4.760	4.521	4.558	4.849	5.125	4.634	4.496	4.365	4.366	4.457

Article.	Unit.	New Orleans, La.					New York, N. Y.				
Calico, 24 to 25 inch	Yard.	$0.150	$0.131	$0.131	$0.120	$0.117	$0.173	$0.125	$0.132	$0.129	$0.140
Percale	do.	.226	.226	.215	.225	.213	.284	.254	.253	.257	.261
Gingham, apron, 27 to 28 inch	do.	.180	.170	.150	.174	.150	.181	.152	.155	.155	.166
Gingham, dress, 27-inch	do.	.220	.224	.216	.222	.215	.262	.262	.249	.260	.257
Gingham, dress, 32-inch	do.	.637	.598	.499	.503	.466	.628	.588	.541	.515	.515
Muslin, bleached	do.	.192	.178	.174	.191	.170	.230	.213	.210	.225	.220
Sheeting, bleached, 9–4	do.	.557	.508	.482	.522	.513	.682	.644	.650	.674	.697
Sheets, bleached, 81 by 90	Each.	1.695	1.407	1.319	1.440	1.434	1.626	1.593	1.611	1.629	1.711
Outing flannel, 27 to 28 inch	Yard.	.184	.184	.182	.182	.179	.263	.223	.227	.223	.218
Flannel, white, wool, 27-inch	do.	.....	.....	.750	.750	.750	.979	.991	1.008	1.030	.930
Blankets, cotton, 66 by 80	Pair.	5.130	.....	4.415	4.270	.....	5.462	4.517	4.483	4.550	4.130

Article.	Unit.	Norfolk, Va.					Omaha, Nebr.				
Calico, 24 to 25 inch	Yard.	$0.150	.....	$0.150	$0.150	$0.139	$0.142	$0.127	$0.141	$0.141	$0.149
Percale	do.	.273	$0.258	.240	.240	.246	.286	.276	.259	.290	.290
Gingham, apron, 27 to 28 inch	do.	.183	.175	.175	.179	.182	.185	.182	.173	.188	.189
Gingham, dress, 27-inch	do.	.243	.244	.241	.242	.242	.268	.252	.259	.260	.263
Gingham, dress, 32-inch	do.	.455	.455	.461	.457	.485	.581	.529	.509	.488	.533
Muslin, bleached	do.	.245	.216	.205	.218	.216	.232	.204	.212	.232	.219
Sheeting, bleached, 9–4	do.	.701	.677	.664	.675	.691	.741	.720	.722	.725	.744
Sheets, bleached, 81 by 90	Each.	1.699	1.685	1.647	1.697	1.686	1.725	1.696	1.713	1.784	1.864
Outing flannel, 27 to 28 inch	Yard.	.249	.231	.190	.199	.196	.256	.215	.207	.210	.218
Flannel, white, wool, 27-inch	do.	1.035	1.035	1.035	1.058	1.058	1.250	1.210	1.070	1.088	1.139
Blankets, cotton, 66 by 80	Pair.	5.143	.....	3.317	3.500	3.500	4.707	4.382	4.663	4.544	4.705

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON FEB. 15, MAY 15, AUG. 15, AND OCT. 15, 1921, AND ON MAR. 15, 1922—Continued.

Article.	Unit.	Peoria, Ill.					Philadelphia, Pa.				
		1921				1922	1921				1922
		Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.
Calico, 24 to 25 inch	Yard.	.....	$0.125	$0.125	$0.125	$0.108	$0.176	$0.119	$0.119	$0.121	$0.121
Percale	...do..	$0.250	.240	.292	.271	.251	.253	.251	.251	.252	.263
Gingham, apron, 27 to 28 inch	...do..	.167	.156	.164	.174	.176	.169	.161	.164	.159	.168
Gingham, dress, 27-inch	...do..	.241	.249	.262	.257	.250	.216	.221	.236	.236	.243
Gingham, dress, 32-inch	...do..	.565	.522	.544	.570	.548	.499	.526	.531	.512	.530
Muslin, bleached	...do..	.221	.213	.203	.223	.225	.238	.231	.226	.237	.232
Sheeting, bleached, 9–4	...do..	.630	.687	.680	.678	.734	.676	.657	.654	.680	.714
Sheets, bleached, 81 by 90	Each.	1.673	1.619	1.658	1.697	1.741	1.623	1.581	1.555	1.564	1.625
Outing flannel, 27 to 28 inch	Yard.	.246	.226	.240	.220	.213	.223	.203	.193	.208	.216
Flannel, white, wool, 27-inch	...do..	.....	.....	.950	.950	1.250	1.101	1.068	1.020	1.027	1.052
Blankets, cotton, 66 by 80	Pair..	5.313	4.626	4.152	4.478	4.353	4.664	3.737	4.174	4.369	4.328
		Pittsburgh, Pa.					Portland, Me.				
Calico, 24 to 25 inch	Yard.	$0.156	$0.144	$0.148	$0.134	$0.133	.....	.....	.....	$0.125	$0.125
Percale	...do..	.279	.265	.255	.245	.251	$0.235	$0.250	$0.258	.237	.246
Gingham, apron, 27 to 28 inch	...do..	.178	.172	.149	.149	.162	.190	.190	.190	.190	.190
Gingham, dress, 27-inch	...do..	.239	.229	.236	.243	.238	.245	.250	.250	.250	.250
Gingham, dress, 32-inch	...do..	.551	.563	.528	.547	.498	.493	.521	.507	.501	.494
Muslin, bleached	...do..	.219	.201	.203	.223	.221	.224	.206	.218	.226	.218
Sheeting, bleached, 9–4	...do..	.674	.640	.632	.641	.664	.651	.674	.639	.647	.680
Sheets, bleached, 81 by 90	Each.	1.692	1.703	1.623	1.618	1.623	1.602	1.649	1.671	1.664	1.688
Outing flannel, 27 to 28 inch	Yard.	.257	.205	.193	.191	.194	270	.247	.239	.222	.217
Flannel, white, wool, 27-inch	...do..	1.000	.813	.865	.865	.772	1.445	.935	.865	.990	.985
Blankets, cotton, 66 by 80	Pair..	3.450	4.350	3.897	3.963	3.600	4.347	4.058	4.060	4.643	4.273
		Portland, Oreg.					Providence, R. I.				
Calico, 24 to 25 inch	Yard.	$0.138	$0.135	$0.135	$0.135	$0.135	$0.135	$0.125	$0.129	$0.137	$0.143
Percale	...do..	.336	.329	.293	.286	.286	.250	.241	.229	.244	.232
Gingham, apron, 27 to 28 inch	...do..	.183	.178	.178	.167	.161	.178	.160	.194	.171	.174
Gingham, dress, 27-inch	...do..	.243	.245	.243	.247	.238	.252	.217	.228	.235	.240
Gingham, dress, 32-inch	...do..	.527	.561	.567	.555	.558	.456	.457	.474	.461	.453
Muslin, bleached	...do..	.238	.239	.228	.233	.235	.193	.200	.204	.213	.212
Sheeting, bleached, 9–4	...do..	.646	.633	.650	.652	.652	.633	.613	.607	.640	.666
Sheets, bleached, 81 by 90	Each.	1.760	1.753	1.769	1.765	1.756	1.528	1.593	1.621	1.614	1.717
Outing flannel, 27 to 28 inch	Yard.	.244	.222	.207	.212	.218	.245	.241	.236	.235	.235
Flannel, white, wool, 27-inch	...do..	1.133	1.217	1.133	1.100	1.100	.980	.940	.893	.888	.888
Blankets, cotton, 66 by 80	Pair..	5.144	4.748	4.748	4.524	4.495	4.550	4.613	4.519	4.934	4.717
		Richmond, Va.					Rochester, N. Y.				
Calico, 24 to 25 inch	Yard.	$0.145	$0.162	$0.159	$0.141	$0.127	$0.138	$0.125	$0.143	$0.143	$0.143
Percale	...do..	.257	.252	.234	.239	.243	.280	.260	.246	.248	.257
Gingham, apron, 27 to 28 inch	...do..	.156	.157	.150	.160	.178	.164	.156	.154	.167	.163
Gingham, dress, 27-inch	...do..	.244	.236	.230	.234	.239	.251	.242	.234	.238	.230
Gingham, dress, 32-inch	...do..	.409	.468	.469	.468	.432	.562	.589	.579	.563	.531
Muslin, bleached	...do..	.225	.222	.228	.226	.210	.214	.201	.198	.212	.209
Sheeting, bleached, 9–4	...do..	.652	.647	.639	.688	.703	.621	.637	.634	.639	.647
Sheets, bleached, 81 by 90	Each.	1.615	1.594	1.528	1.601	1.675	1.773	1.748	1.795	1.839	1.815
Outing flannel, 27 to 28 inch	Yard.	.251	.219	.200	.201	.200	.253	.233	.221	.213	.203
Flannel, white, wool, 27-inch	...do..	.913	.906	.897	.911	.876	1.173	1.125	1.115	1.115	1.115
Blankets, cotton, 66 by 80	Pair..	5.229	5.274	4.264	4.468	4.398	5.920	4.566	5.050	4.340	4.432

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON FEB. 15, MAY 15, AUG. 15, AND OCT. 15, 1921, AND ON MAR. 15, 1922—Concluded.

Article.	Unit.	St. Louis, Mo.					St. Paul, Minn.				
		1921				1922	1921				1922
		Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.
Calico, 24 to 25 inch	Yard.	$0.131	$0.144	$0.120	$0.134	$0.150	$0.156	$0.128	$0.131	$0.131	$0.128
Percale	...do..	.262	.273	248	.280	.269	.251	.262	.256	.255	.261
Gingham, apron, 27 to 28 inch	...do..	.154	.149	.149	.160	.169	.163	.158	.164	.164	.163
Gingham, dress, 27 inch	...do..	.238	.243	.238	.249	.256	.242	.244	.240	.248	.243
Gingham, dress, 32 inch	...do..	.593	.508	.502	.521	.517	.503	.530	.502	.516	.463
Muslin, bleached	...do..	.208	.203	.197	.207	.201	.217	.227	.212	.210	.225
Sheeting, bleached, 9-4	...do..	.670	.652	.650	.680	.711	.632	.643	.636	.658	.699
Sheets, bleached, 81 by 90	Each.	1.729	1.627	1.607	1.666	1.601	1.631	1.686	1.629	1.642	1.712
Outing flannel, 27 to 28 inch	Yard.	.238	.220	.215	.237	.198	.242	.201	.201	.210	.202
Flannel, white, wool, 27-inch	...do..	.985	.960	.848	.910	.....	.980	.....	.....	.....	.975
Blankets, cotton, 66 by 80	Pair..	4.916	4.628	4.511	4.476	4.385	5.346	5.393	4.838	4.584	4.501
		Salt Lake City, Utah.					San Francisco, Calif.				
Calico, 24 to 25 inch	Yard.	$0.144	$0.132	$0.134	$0.144	$0.144	.....	$0.100	$0.100	$0.100	.....
Percale	...do..	.299	.285	.289	.300	.300	$0.372	.337	.322	.334	$0.329
Gingham, apron, 27 to 28 inch	...do..	.154	.150	.161	.148	.169	.175	.175	.150	.165	.165
Gingham, dress, 27-inch	...do..	.238	.247	.257	.255	.275	.254	.259	.258	.261	.261
Gingham, dress, 32-inch	...do..	.494	.558	.550	.551	.517	.581	.600	.578	.550	.571
Muslin, bleached	...do..	.240	.218	.232	.230	.230	.235	.240	.225	.225	.222
Sheeting, bleached, 9-4	...do..	.833	.741	.730	.711	.749	.725	.687	.687	.725	.775
Sheets, bleached, 81 by 90	Each.	1.844	1.864	1.771	1.765	1.834	1.957	1.782	1.768	1.763	1.846
Outing flannel, 27 to 28 inch	Yard.	.291	.241	.240	.238	.234	.323	.269	.254	.250	.243
Flannel, white, wool, 27-inch	...do..	.....	1.217	.820	.855	.717	1.625	1.250	1.750	1.175	1.125
Blankets, cotton, 66 by 80	Pair..	4.984	4.987	5.490	4.906	4.774	5.920	5.104	5.073	4.955	4.955
		Savannah, Ga.					Scranton, Pa.				
Calico, 24 to 25 inch	Yard.	.....	.....	.....	.....	.....	$0.150	$0.125	$0.125	$0.155	$0.121
Percale	...do..	$0.257	$0.257	$0.230	$0.250	$0.263	.290	.250	.247	.247	.247
Gingham, apron, 27 to 28 inch	...do..	.158	.150	.150	.155	.175	.161	.159	.158	.158	.169
Gingham, dress, 27-inch	...do..	.247	.243	.248	.248	.252	.250	.246	.242	.251	.248
Gingham, dress, 32-inch	...do..	.460	.503	.538	.537	.494	.470	.548	.492	.512	.484
Muslin, bleached	...do..	.243	.199	.209	.221	.223	.252	.229	.219	.244	.220
Sheeting, bleached, 9-4	...do..	.620	.608	.520	.645	.699	.695	.705	.679	.730	.758
Sheets, bleached, 81 by 90	Each.	1.630	1.370	1.401	1.559	1.671	1.856	1.756	1.783	1.816	1.809
Outing flannel, 27 to 28 inch	Yard.	.246	.209	.211	.208	.201	.236	.211	.191	.216	.215
Flannel, white, wool, 27-inch	...do..	.....	.....	.890	.890	.785	.990	.865	.845	.953	.903
Blankets, cotton, 66 by 80	Pair..	4.500	.....	3.750	4.316	.....	4.707	3.990	4.559	4.769	4.671
		Seattle, Wash.					Springfield, Ill.				
Calico, 24 to 25 inch	Yard.	$0.150	$0.145	$0.130	$0.130	$0.117	$0.136	$0.134	$0.126	$0.129	$0.124
Percale	...do..	.317	.283	.275	.275	.279	.264	.258	.249	.243	.244
Gingham, apron, 27 to 28 inch	...do..	.192	.192	.196	.206	.183	.173	.168	.168	.175	.171
Gingham, dress, 27-inch	...do..	.259	.244	.242	.245	.245	.228	.253	.259	.240	.248
Gingham, dress, 32-inch	...do..	.543	.537	.555	.564	.540	.435	.411	.399	.438	.411
Muslin, bleached	...do..	.251	.235	.237	.242	.245	.228	.199	.206	.210	.200
Sheeting, bleached, 9-4	...do..	.708	.708	.704	.717	.753	.605	.653	.646	.653	.659
Sheets, bleached, 81 by 90	Each.	1.800	1.785	1.840	1.827	1.883	1.752	1.617	1.589	1.627	1.706
Outing flannel, 27 to 28 inch	Yard.	.263	.237	.236	.239	.241	.233	.221	.211	.218	.227
Flannel, white, wool, 27-inch	...do..	1.225	1.288	1.138	1.138	1.138	.750	.750	.575	.717	.750
Blankets, cotton, 66 by 80	Pair..	4.700	4.479	4.700	4.621	4.707	4.917	4.203	4.069	4.124	4.108
		Washington, D. C.									
Calico, 24 to 25 inch	Yard.	$0.170	$0.160	$0.160	$0.160	$0.160					
Percale	...do..	.267	.277	.267	.269	.270					
Gingham, apron, 27 to 28 inch	...do..	.179	.170	.168	.168	.165					
Gingham, dress, 27-inch	...do..	.263	.255	.261	.283	.275					
Gingham, dress, 32-inch	...do..	.511	.498	.498	.500	.498					
Muslin, bleached	...do..	.213	.214	.204	.227	.201					
Sheeting, bleached, 9-4	...do..	.683	.669	.675	.680	.702					
Sheets, bleached, 81 by 90	Each.	1.652	1.598	1.624	1.712	1.625					
Outing, flannel, 27 to 28 inch	Yard.	.246	.198	.192	.199	.202					
Flannel, white, wool, 27-inch	...do..	.875	.826	.796	.851	.980					
Blankets, cotton, 66 by 80	Pair..	5.592	5.403	5.065	4.986	4.562					

Index Numbers of Wholesale Prices in March.

LITTLE change in the general level of wholesale prices in March, as compared with the previous month, is shown by information gathered by the United States Department of Labor through the Bureau of Labor Statistics. Measured by the Bureau's weighted index number, which includes 327 commodities or price series, an increase of less than two-thirds of 1 per cent is reported.

Farm products again showed an increase, due to advances in grain, hay, cattle, hogs, sheep, and poultry. The increase in this group over the February level was approximately 1½ per cent. Food, fuel, building materials, chemicals, and housefurnishing goods showed no change in the general price level. In the two groups of cloths and clothing and metals and metal products prices in March averaged somewhat lower than in February. On the other hand, the group of miscellaneous commodities, including, among others, such important articles as cottonseed meal and oil, linseed meal, slaughterhouse tankage, and a number of vegetable oils largely used for industrial purposes, showed an increase of 2 per cent.

Of the 327 commodities, or price series, for which comparable data for February and March were obtained, increases were found to have occurred for 104 commodities and decreases for 83 commodities. In the case of 140 commodities no change in average prices was reported.

INDEX NUMBERS OF WHOLESALE PRICES, BY GROUPS OF COMMODITIES.

[1913=100.]

Commodity group.	March, 1921.	February, 1922.	March, 1922.
Farm products	125	126	128
Food, etc	150	138	138
Cloths and clothing	192	183	182
Fuel and lighting	207	183	183
Metals and metal products	139	115	114
Building materials	[1] 208	[1] 202	[1] 202
Chemicals and drugs	171	159	159
House-furnishing goods	275	213	213
Miscellaneous	167	150	153
All commodities	162	151	152

[1] For revised index numbers of wholesale prices of building materials see pages 81 to 84 of this issue of the MONTHLY LABOR REVIEW.

Comparing prices in March with those of a year ago, as measured by changes in the index numbers, it is seen that farm products alone averaged higher, the increase in this group being over 2 per cent. In all other groups prices were lower than in the corresponding month of last year, ranging from 5 per cent in the case of cloths and clothing to 22½ per cent in the case of house-furnishing goods. All commodities, considered in the aggregate, decreased 6 per cent in price in the period stated.

Wholesale Prices of Commodities, January to March, 1922.

TO MEET the growing demand for more detailed information concerning the course of wholesale prices, the United States Department of Labor, through the Bureau of Labor Statistics, publishes herewith a complete list of all commodities included in its series of index numbers, together with the latest record of price changes available at the time of its preparation. For convenience of comparison with pre-war prices, index numbers based on average prices in the year 1913 as 100 are shown in addition to the statement of absolute money prices. Figures for the first three months of 1922 are given in the table which follows:

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1922.

Commodity.	Average prices.			Index numbers. (1913=100.)		
	January.	February.	March.	January.	February.	March.
Farm products.						
(a) Grains:						
Barley, malting, per bushel, Chicago	$0.582	$0.633	$0.644	93.1	101.1	103.0
Corn, per bushel, Chicago—						
Contract grades	.484	.572	.575	77.4	91.4	91.9
No. 3 mixed	.474	.557	.561	77.0	90.5	91.1
Oats, contract grades, per bushel, Chicago	.375	.398	.393	99.7	105.9	104.7
Rye, No. 2, per bushel, Chicago	.809	.992	1.021	127.2	156.0	160.4
Wheat, per bushel—						
No. 1, northern spring, Chicago	1.285	1.400	1.352	140.7	153.3	148.1
No. 2, red winter, Chicago	1.196	1.382	1.357	121.3	140.1	137.6
No. 2, hard winter, Kansas City	1.124	1.343	1.354	128.2	153.1	154.4
No. 1, northern spring, Minneapolis	1.300	1.522	1.500	148.8	174.2	171.8
No. 1, hard white, Portland, Oreg	1.142	1.298	1.463	122.9	139.7	157.4
(b) Live stock and poultry:						
Cattle, steers, per 100 pounds, Chicago—						
Choice to prime	8.875	9.050	9.213	99.4	101.4	103.2
Good to choice	8.150	8.638	8.731	95.8	101.5	102.6
Hogs, per 100 pounds, Chicago—						
Heavy	7.765	9.900	10.338	92.8	118.3	123.6
Light	8.160	10.263	10.588	96.5	121.4	125.2
Sheep, per 100 pounds, Chicago—						
Ewes, native, all grades	5.260	6.094	7.094	112.2	130.0	151.4
Lambs, western, good to choice	12.170	14.175	14.563	156.1	181.9	186.8
Wethers, fed, good to choice	7.275	8.469	9.000	136.1	158.4	168.3
Poultry, live fowls, per pound—						
Chicago	.240	.253	.265	155.7	163.9	172.0
New York	.283	.280	.312	168.8	167.3	186.4
(c) Other farm products:						
Beans, medium, choice, per 100 pounds, New York	4.960	5.831	6.775	124.3	146.2	169.8
Clover seed, contract grades, per 100 pounds, Chicago	20.840	22.490	24.520	126.2	136.2	148.5
Cotton, middling, per pound—						
New Orleans	.165	.166	.167	129.9	130.4	131.4
New York	.179	.181	.183	140.0	141.2	143.2
Cotton seed, per ton, average price at gin	29.240	30.170	32.720	134.2	138.5	150.2
Eggs, fresh, per dozen—						
Firsts, western, Boston	.416	.396	.263	165.5	157.6	104.4
Firsts, Chicago	.368	.316	.226	163.0	139.8	100.0
Extra firsts, Cincinnati	.369	.304	.221	164.7	136.1	98.6
Candled, New Orleans	.420	.370	.260	179.3	157.9	111.0
Firsts, New York	.398	.361	.243	159.8	145.1	97.8
Extra firsts, western, Philadelphia	.419	.398	.260	158.9	150.8	98.6
Extra, pullets, San Francisco	.350	.273	.230	130.7	101.8	85.9
Flaxseed, No. 1, per bushel, Minneapolis	2.099	2.528	2.590	155.6	187.4	189.8

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1924—Continued.

Commodity.	Average prices.			Index numbers. (1913=100.)		
	January.	February.	March.	January.	February.	March.
Farm products—Concluded.						
(c) Other farm products—Concluded.						
Hay, per ton—						
Alfalfa, No. 1, Kansas City	$20.375	$20.438	$22.188	143.6	144.1	156.4
Clover, mixed, No. 1, Cincinnati	16.700	16.625	18.125	107.2	106.7	116.3
Timothy, No. 1, Chicago	21.800	21.500	23.625	136.0	134.1	147.4
Hides and skins, per pound—						
Calfskins, No. 1 country, Chicago	.138	.138	.135	72.9	73.2	71.6
Goatskins, Brazilian, New York	1.102	1.053	.960	155.0	148.1	135.0
Hides, heavy, country cows, No. 1, Chicago	.083	.087	.083	54.7	57.6	54.7
Hides, packers, heavy, native steers, Chicago	.165	.160	.139	89.7	87.0	75.5
Hides, packers, heavy, Texas steers, Chicago	.160	.155	.132	88.4	85.7	72.7
Hops, prime to choice, per pound—						
New York State, New York	.369	.313	.280	138.6	117.4	105.1
Pacifics, Portland, Oreg	.179	.173	.193	104.1	100.3	112.0
Milk, fresh, per quart—						
Chicago (vicinity)	.038	.037	.037	101.6	97.1	97.1
New York (vicinity)	.073	.071	.061	206.3	199.7	171.4
San Francisco (vicinity)	.061	.061	.061	155.4	155.4	155.4
Onions, fresh, yellow, per 100 pounds, Chicago	6.175	7.438	8.031	392.7	473.1	510.9
Peanuts, No. 1, per pound, Norfolk, Va	.045	.041	.039	127.0	115.2	109.3
Potatoes—						
White, good to choice, per 100 pounds, Chicago	2.070	1.981	1.763	202.2	193.5	172.2
Sweet, No. 1, per five-eighth bushel, Philadelphia	1.138	1.300	1.295	235.7	269.4	268.3
Rice, per pound, New Orleans—						
Blue Rose, head, clean	.039	.039	.044	(1)	(1)	(1)
Honduras, head, clean	.049	.049	.054	97.4	97.4	105.7
Tobacco, Burley, good leaf, dark red, per 100 pounds, Louisville, Ky	27.500	27.500	27.500	208.3	208.3	208.3
Wool, Ohio, per pound, Boston—						
Fine clothing, scoured	1.027	1.081	1.162	166.3	175.1	188.2
Fine delaine, scoured	1.000	1.071	1.214	182.0	195.1	221.0
Half blood, scoured	.826	.870	.978	166.9	174.9	196.8
One-fourth and three-eighth grades, scoured	.582	.673	.727	121.6	140.5	151.9
Foods.						
(a) Meats:						
Beef, fresh, per pound—						
Carcass, good native steers, Chicago	.154	.145	.145	118.8	112.0	112.0
Sides, native, New York	.127	.128	.131	101.4	101.8	104.9
Beef, salt, extra mess, per barrel (200 pounds), New York	13.400	14.000	13.625	70.8	74.0	72.0
Hams, smoked, per pound, Chicago	.221	.267	.306	133.0	160.8	184.3
Lamb, dressed, per pound, Chicago	.240	.268	.274	161.4	179.9	184.3
Mutton, dressed, per pound, New York	.120	.123	.138	117.1	120.1	134.7
Pork, fresh, per pound—						
Loins, Chicago	.160	.169	.198	107.7	113.6	133.2
Loins, western, New York	.189	.198	.217	124.0	129.7	142.5
Pork, cured—						
Mess, salt, per barrel (200 pounds), New York	23.100	24.875	26.250	102.8	110.7	116.8
Sides, rough, per pound, Chicago	.102	.122	.141	82.8	98.9	113.8
Sides, short clear, per pound, Chicago	.116	.134	.148	90.7	105.3	116.2
Poultry, dressed, per pound—						
Hens, heavy, Chicago	.267	.263	.271	184.6	181.5	187.6
Fowls, 4½-5½ pounds to dozen, New York	.275	.270	.301	150.8	148.0	165.0
Veal, dressed, good to prime, per pound, New York	.300	.300	.300	165.9	165.9	165.9
(b) Butter, cheese, and milk:						
Butter, creamery, extra, per pound—						
Boston	.370	.366	.381	116.6	115.5	120.1
Chicago	.351	.363	.376	113.1	117.0	121.2
Cincinnati	.400	.400	.415	115.3	115.3	119.6
New Orleans	.418	.418	.426	124.4	124.2	126.8
New York	.376	.373	.387	116.6	115.5	120.0
Philadelphia	.371	.370	.383	113.9	113.5	117.5
St. Louis	.345	.369	.378	111.6	119.4	122.1
San Francisco	.396	.443	.364	125.0	130.5	114.8
Cheese, whole milk, per pound—						
American twins, Chicago	.200	.204	.193	140.8	144.1	136.2
State, fresh flats, colored, average, New York	.203	.194	.202	131.7	126.2	131.0
California flats, fancy, San Francisco	.244	.251	.213	152.9	157.7	133.6
Milk, fresh. (See Farm products).						
Milk, condensed, case of 48 14-ounce tins, New York	5.275	5.000	4.731	112.2	106.4	100.7
Milk, evaporated, case of 48 16-ounce tins, New York	4.165	3.850	3.906	117.8	108.9	110.5

[1] No 1913 base price.

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1922—Continued.

Commodity.	Average prices.			Index numbers. (1913=100.)		
	January.	February.	March.	January.	February.	March.
Foods—Continued.						
(c) Other foods:						
Beans, medium, choice. (See Farm products.)						
Bread, per pound—						
Chicago	$0.076	$0.067	$0.076	177.0	156.2	177.0
Cincinnati	.062	.062	.062	174.7	174.7	174.7
New Orleans	.062	.062	.066	203.9	203.9	216.1
New York	.068	.069	.069	160.1	162.5	162.5
San Francisco	.061	.061	.061	151.3	151.3	151.3
Cocoa, beans, Arriba, per pound, New York	.109	.122	.118	71.7	80.4	77.6
Coffee, Rio, No. 7, per pound, New York	.096	.090	.096	86.5	81.0	86.2
Copra, South Sea, sun dried, per pound, New York	.045	.045	.047	43.2	42.9	45.0
Eggs, fresh, dozen. (See Farm products.)						
Fish—						
Cod, large, shore, pickle cured, per 100 pounds, Gloucester, Mass	6.500	6.500	6.500	96.9	96.9	96.9
Herring, large, split, per barrel (180-190 pounds), New York	7.500	7.500	7.500	113.2	113.2	113.2
Mackerel, salt, large 3s, per barrel, Boston	16.335	16.335	16.335	147.2	147.2	147.2
Salmon, canned, Alaska, red, per dozen, factory	2.525	2.525	2.463	172.9	172.9	168.6
Flour, rye, white, per barrel, Minneapolis	4.940	6.206	6.206	158.2	198.7	198.7
Flour, wheat, per barrel—						
Winter patents, Kansas City	6.619	7.325	7.444	165.0	182.6	185.6
Winter straights, Kansas City	5.875	6.700	6.781	152.7	174.2	176.3
Standard patents, Minneapolis	7.000	7.975	7.813	152.7	174.0	170.4
Second patents, Minneapolis	6.625	7.600	7.438	149.8	171.9	168.2
Patents, Portland, Oreg	6.991	7.768	8.557	155.5	172.8	190.4
Patents, soft winter, St. Louis	6.100	6.788	6.994	153.6	148.6	153.2
Straights, soft winter, St. Louis	5.563	6.150	6.425	130.8	144.6	151.1
Patents, Toledo	5.856	6.725	6.813	123.9	142.3	144.2
Fruit, canned, per case, New York—						
Peaches, California, standard 2½s	1.900	1.900	1.950	125.2	125.2	128.5
Pineapple, Hawaiian, sliced, standard 2½s	2.375	2.375	3.100	115.7	115.7	151.0
Fruit, dried, per pound, New York—						
Apples, evaporated, State, choice	.173	.173	.179	240.3	240.3	249.0
Currants, uncleaned, barrels	.125	.125	.130	182.8	182.8	190.1
Prunes, California, 60-70s	.098	.103	.119	148.6	156.3	182.0
Raisins, coast, seeded, bulk	.150	.150	.150	206.7	206.7	206.7
Fruit, fresh—						
Apples, Baldwins, per barrel, Chicago	7.875	8.531	7.938	248.1	268.8	250.1
Bananas, Jamaica 9s, per bunch, New York	2.500	2.500	2.500	162.5	162.5	162.5
Lemons, California (300-360 count), per box, Chicago	4.125	6.000	5.406	71.5	103.9	93.6
Oranges, Calif., choice, per box, Chicago	4.950	5.094	6.906	112.0	115.3	156.3
Glucose, 42° mixing, per 100 pounds, New York	2.150	2.495	2.545	100.6	116.7	119.1
Hominy grits, bulk, car lots, per 100 pounds, f. o. b. mill	.960	1.155	1.308	58.2	70.0	79.2
Lard, prime, contract, per pound, New York	.100	.118	.116	91.0	107.0	105.2
Meal, corn, per 100 pounds—						
White, f. o. b. Decatur, Ill	.910	1.105	1.258	56.9	69.0	78.6
Yellow, Philadelphia	1.450	1.615	1.768	101.2	112.7	123.3
Molasses, New Orleans, fancy, per gallon, New York	.410	.410	.410	107.6	107.6	107.6
Oatmeal, carlots, in barrels (180 pounds), per hundredweight, New York	2.678	2.868	2.962	108.2	115.9	119.7
Oleomargarine, standard, uncolored, per pound, Chicago	.190	.175	.175	116.8	107.7	107.7
Oleo oil, extra, per pound, Chicago	.100	.099	.101	86.4	86.1	87.8
Pepper, black, Singapore, per pound, New York	.098	.103	.104	90.6	94.5	95.9
Rice. (See Farm products).						
Salt, American, medium, per barrel (280 pounds), Chicago	2.440	2.440	2.440	239.2	239.2	239.2
Sugar, per pound, New York—						
Granulated, in barrels	.048	.049	.052	112.4	115.2	120.8
Raw, 96° centrifugal	.036	.038	.039	104.0	107.1	112.0
Tallow, edible, per pound, Chicago	.074	.077	.081	92.7	96.6	101.5
Tea, Formosa, fine, per pound, New York	.300	.300	.300	120.8	120.8	120.8
Vegetables, canned—						
Corn, Maryland-Maine style, per dozen, New York	1.000	1.000	1.000	157.6	157.6	157.6
Peas, State and western, No. 5, per dozen, New York	1.425	1.425	1.425	164.4	164.4	164.4
Tomatoes, New Jersey, standard, No. 3, per dozen, New York	1.650	1.650	1.650	126.9	126.9	126.9
Vegetables, fresh. (See Farm products.)						

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1922—Continued.

Commodity.	Average prices.			Index numbers. (1913=100.)		
	January.	February.	March.	January.	February.	March.
Foods—Concluded.						
(c) Other foods—Concluded.						
Vegetable oil—						
Cocoanut, crude, per pound, Pacific coast	$0.091	$0.088	$0.085	76.1	73.0	70.9
Corn, crude, in barrels, per pound, New York	.084	.091	.114	138.5	150.2	188.5
Cottonseed, prime summer yellow, per pound, New York	.086	.101	.115	118.1	139.3	158.5
Olive, edible, in barrels, per gallon, New York	1.600	1.825	1.800	94.8	108.1	106.6
Peanut, crude, per pound, f. o. b. mill	.075	.083	.103	(1)	(1)	(1)
Soya bean, crude, in barrels, per pound, New York	.088	.090	.107	143.0	147.1	174.7
Vinegar, cider, 40 grain, in barrels, per gallon, New York	.300	.300	.300	268.8	268.8	268.8
Cloths and clothing.						
(a) Boots and shoes, per pair, factory:						
Children's—						
Little boy's gun metal, blucher	1.615	1.615	1.615	166.5	166.5	166.5
Child's, gun metal polish, high cut	1.568	1.568	1.568	181.7	181.7	181.7
Misses', black vici polish, high cut	1.853	1.853	1.853	173.2	173.2	173.2
Youth's, gun metal, blucher	1.473	1.473	1.473	143.4	143.4	143.4
Men's—						
Black calf, blucher	6.750	6.750	6.621	216.8	216.8	212.7
Black calf, Goodyear welt, bal	4.500	4.500	4.500	138.5	138.5	138.5
Gun metal, Goodyear welt, blucher	4.600	4.600	4.584	235.3	235.3	234.5
Gun metal, Goodyear welt, bal	5.600	5.600	5.600	212.8	212.8	212.8
Tan grain blucher	1.645	1.645	1.645	122.2	122.2	122.2
Vici kid, black, Goodyear welt	6.000	6.000	6.000	209.3	209.3	209.3
Women's—						
Black kid, Goodyear welt, 8½-inch lace	4.750	4.750	4.750	158.3	158.3	158.3
Kid, Goodyear welt, 9-inch lace	5.250	5.250	5.210	212.7	212.7	211.1
Kid, McKay sewed, 8½-inch lace	4.750	4.750	4.710	241.0	241.0	238.9
Patent leather pump, McKay sewed	3.600	3.600	3.600	261.8	261.8	261.8
(b) Cotton goods:						
Blankets, colored, 2 pounds to the pair, per pair, New York	1.326	1.235	1.235	219.1	204.1	204.1
Denims, Massachusetts, 2.20 yards to the pound, per yard, New York	.193	.191	.191	149.9	148.7	148.7
Drillings, brown, per yard, New York—						
Massachusetts D standard, 30-inch	.127	.125	.125	154.1	151.6	151.2
Pepperell, 29-inch, 2.85 yards to the pound	.130	.126	.125	158.0	153.5	151.9
Flannels, per yard, New York—						
Colored, 2.75 yards to the pound	.176	.163	.163	174.0	160.4	160.4
Unbleached, 3.80 yards to the pound	.137	.128	.128	184.9	173.0	173.0
Ginghams, per yard—						
Amoskeag, 27-inch, 6.37 yards to the pound, New York	.126	.126	.126	193.9	193.9	193.9
Lancaster, 26½-inch, weight 6.50 yards to the pound, Boston	(2)	.135	.135	(2)	218.4	218.4
Hosiery, per dozen pairs—						
Men's half hose, combed yarn, New York	1.694	1.648	1.600	210.6	204.9	198.8
Women's cotton, silk mercerized, mock seam, New York	2.761	2.800	2.800	155.9	158.1	158.1
Women's, combed yarn, 16-ounce, New York	1.744	1.700	1.658	180.7	176.2	171.8
Muslin, bleached, 4/4, per yard—						
Fruit of the Loom, New York	.166	.166	.166	195.0	195.0	195.0
Lonsdale, factory	.147	.147	.144	181.9	181.9	178.1
Rough Rider, New York	.139	.134	.133	173.1	167.3	166.0
Wamsutta, factory	.289	.289	.289	258.8	258.8	258.8
Print cloth, 27 inch, 7.60 yards per pound, per yard, Boston	.058	.056	.060	167.5	163.2	173.0
Sheeting, brown, 4/4, yard—						
Indian Head, 2.85 yards to the pound, Boston	.115	.115	.115	136.6	136.6	136.6
Pepperell, 3.75 yards to the pound, New York	.118	.117	.114	160.3	159.8	155.0
Ware Shoals, 4 yards to the pound, New York	.098	.098	.096	159.6	159.6	156.7
Thread, 6 cord, J. & P. Coats, per spool, New York	.058	.058	.058	148.7	148.7	148.7
Tickings, Amoskeag, A. C. A., 2.05 yards to the pound per yard, New York	.250	.250	.250	185.7	185.7	185.7
Underwear—						
Men's shirts and drawers, per dozen garments, New York	7.500	7.500	7.500	176.5	176.5	176.5
Women's union suits, combed yarn, per dozen, New York	14.000	14.000	14.000	169.7	169.7	169.7

[1] No 1913 base price.

[2] No quotations.

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1922—Continued.

Commodity.	Average prices.			Index numbers. (1913=100.)		
	January.	February.	March.	January.	February.	March.
Cloths and clothing.—Concluded.						
(b) Cotton goods—Concluded.						
Yarn, pound, Boston—						
Carded, white, mulespun, northern, 10/1 cones	$0.326	$0.313	$0.314	147.3	141.3	141.7
Carded, white, mulespun, northern, 22/1 cones	.365	.351	.353	147.5	141.6	142.5
Twisted, ordinary, weaving, 20/2	.317	.308	.309	136.5	132.6	132.9
Twisted, ordinary, weaving, 40/2	.501	.494	.491	130.8	129.0	128.0
(c) Woolen goods:						
Blankets, all wool, 4 to 5 pounds to the pair, per pound, factory	1.066	1.066	1.103	139.3	139.3	144.1
Flannel, white, 4/4, Ballard Vale, No. 3, per yard, factory	.820	.820	.820	176.9	176.9	176.9
Overcoating, soft faced, black, per yard, Boston	1.806	1.710	1.710	131.6	124.6	124.6
Suitings, per yard—						
Clay worsted, diagonal, 12-ounce, Boston	2.025	(2)	(2)	172.0	(2)	(2)
Clay worsted, diagonal, 16-ounce, Boston	2.545	2.498	2.498	184.2	180.7	180.7
Middlesex, wool-dyed blue, 16-ounce, New York	2.835	2.835	2.835	183.5	183.5	183.5
Serge, 11-ounce, Boston	2.163	2.115	2.115	191.3	187.1	187.1
Trousering, cotton warp, 11/11½ ounce, yard, New York	1.600	1.600	1.600	141.4	141.4	141.4
Underwear—						
Merino, shirts and drawers, per dozen garments, factory	28.500	28.500	30.500	145.6	145.6	155.8
Men's union suits, 33 per cent worsted, per dozen, New York	26.460	26.460	26.460	269.6	269.6	269.6
Women's dress goods, per yard—						
Broadcloth, 9½-ounce, 54-56-inch, New York	1.976	1.976	1.976	150.2	150.2	150.2
French serge, 35-inch, factory	.650	.650	.650	197.0	197.0	197.0
Poplar cloth, cotton warp, factory	.325	.325	.325	171.1	171.1	171.1
Sicilian cloth, cotton warp, 50-inch, New York	.515	.515	.515	159.2	159.2	159.2
Storm serge, double warp, 50-inch, factory	.815	.815	.815	144.9	144.9	144.9
Yarn, per pound—						
Crossbred stock, 2/32s, per pound, Boston	1.277	1.300	1.250	164.5	167.4	160.9
Half blood, 2/40s, per pound, Philadelphia	1.950	2.000	1.900	174.7	179.1	170.2
Fine domestic, 2/50s, per pound, Philadelphia	2.175	2.250	2.200	206.3	213.4	208.7
(d) Silk, etc.:						
Linen shoe thread, 10s, Barbour, per pound, New York	2.077	2.077	2.077	232.6	232.6	232.6
Silk, raw, pound—						
China, Canton filature extra extra A, New York	7.790	6.904	6.332	222.6	197.3	181.0
Japan, Kansai, No. 1, New York	6.762	6.566	6.027	185.8	180.4	165.6
Japan, special extra extra, New York	7.350	7.056	6.566	180.3	173.1	161.2
Silk yarn, per pound, New York—						
Domestic, gray spun, 60/1	4.230	4.230	4.512	145.0	145.0	154.7
Domestic, gray spun, 60/2, No. 1	5.405	5.405	5.499	155.9	155.9	158.6
Fuel and lighting.						
(a) Anthracite coal, per gross ton, New York, tidewater:						
Broken	10.212	10.214	10.210	229.7	229.7	229.6
Chestnut	10.641	10.633	10.640	200.3	200.1	200.2
Egg	10.346	10.348	10.341	204.3	204.4	204.2
Stove	10.694	10.694	10.694	211.3	211.3	211.3
(b) Bituminous coal:						
Mine run, per net ton, Chicago	5.245	5.270	5.295	(1)	(1)	(1)
Prepared sizes, per net ton, Chicago	5.745	5.695	5.545	(1)	(1)	(1)
Screenings, per net ton, Chicago	3.850	3.725	3.825	(1)	(1)	(1)
Mine run, Kanawha, per net ton, Cincinnati	3.750	3.600	3.600	170.5	163.6	163.6
Mine run, smokeless, New River, per net ton, Cincinnati	4.200	4.050	3.950	174.1	167.9	163.7
Mine run, Pocahontas, per gross ton, Norfolk, Va.	4.750	4.750	4.750	158.3	158.3	158.3
Prepared sizes, Pittsburgh, per net ton	4.250	4.250	4.500	(1)	(1)	(1)
(c) Other fuel and lighting:						
Coke, Connellsville, furnace, at ovens, per net ton	2.750	3.038	3.250	112.7	124.5	133.2
Gasoline, motor, per gallon, New York	.263	.245	.240	156.0	145.6	142.6
Matches, average of several brands, per gross, New York	1.540	1.540	1.540	189.7	189.7	189.7
Crude petroleum, at wells, per barrel—						
California, 20°	1.160	1.160	1.160	331.4	331.4	331.4
Kansas-Oklahoma	2.250	2.250	2.250	240.8	240.8	240.8
Pennsylvania	3.300	3.250	3.250	134.7	132.7	132.7
Refined petroleum, per gallon, New York—						
Standard white, 110° fire test	.140	.130	.130	162.2	150.6	150.6
Water white, 150° fire test	.218	.210	.210	176.4	170.3	170.3

[1] No 1913 base price. [2] No quotation.

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1922—Continued.

Commodity.	Average prices.			Index numbers. (1913=100.)		
	January.	February.	March.	January.	February.	March.
Metals and metal products.						
(a) Iron and steel:						
Iron ore, per ton, lower lake ports—						
Mesabi, Bessemer, 55 per cent	$6.200	$6.200	$6.200	149.4	149.4	149.4
Non-Bessemer, 51½ per cent	5.550	5.550	5.550	163.2	163.2	163.2
Pig iron, gross ton—						
Basic, valley furnace	18.150	17.750	17.938	123.4	120.7	122.0
Bessemer, Pittsburgh	21.560	21.460	21.460	125.8	125.3	125.3
Foundry, No. 2 northern, Pittsburgh	21.260	20.835	20.960	132.8	130.2	130.9
Foundry, No. 2, Birmingham, Ala	16.200	15.500	15.000	138.6	132.6	128.3
Ferromanganese, per gross ton, seaboard	59.670	61.463	62.500	102.4	105.4	107.2
Spiegeleisen, 18 and 22 per cent, per gross ton, furnace	25.800	28.063	29.000	103.2	112.3	116.0
Bar iron, per pound—						
Best refined, Philadelphia	.025	.025	.024	131.9	131.9	126.6
Common, f. o. b. Pittsburgh	.021	.021	.021	124.2	124.2	124.2
Bars, reinforcing, per 100 pounds, Pittsburgh	1.500	1.500	1.450	109.0	109.0	105.4
Nails, wire, per 100 pounds, Pittsburgh	2.600	2.500	2.500	143.0	137.5	137.5
Pipe, cast-iron, 6-inch, per net ton, New York	47.300	47.300	47.675	202.4	202.4	204.0
Skelp, grooved, per 100 pounds, Pittsburgh	1.500	1.480	1.400	107.9	106.5	100.7
Steel billets, per gross ton, Pittsburgh:						
Bessemer	28.000	28.000	28.000	108.6	108.6	108.6
Open hearth	28.000	28.000	28.000	107.3	107.3	107.3
Steel, merchant bars, per 100 pounds, Pittsburgh	1.500	1.390	1.390	96.9	89.8	89.8
Steel plates, tank, per pound, Pittsburgh	.015	.014	.014	101.4	93.9	93.9
Steel rails, per gross ton, Pittsburgh:						
Bessemer, standard	40.000	40.000	40.000	142.9	142.9	142.9
Open hearth, standard	40.000	40.000	40.000	133.3	133.3	133.3
Steel sheets, black, per pound, f. o. b. Pittsburgh	.030	.030	.030	134.7	134.7	134.7
Steel, structural shapes, per 100 pounds, Pittsburgh	1.500	1.500	1.450	99.3	99.3	96.0
Terneplate, 8 pounds I. C., per base box (200 pounds), Pittsburgh	9.600	9.600	9.600	138.4	138.4	138.4
Tin plate, domestic, coke, per 100 pounds, Pittsburgh	4.750	4.713	4.600	133.5	132.4	129.3
Wire, per 100 pounds:						
Barbed, galvanized, Chicago	3.530	3.455	3.430	152.9	149.6	148.5
Plain, fence, annealed, Pittsburgh	2.250	2.200	2.250	148.8	145.5	148.8
(b) Nonferrous metals:						
Aluminum, New York, per pound	.175	.175	.177	74.0	74.0	74.8
Copper, ingot, electrolytic, per pound, refinery	.136	.129	.127	86.1	81.9	80.9
Copper, sheet, per pound, New York	.210	.208	.200	99.1	98.2	94.4
Copper wire, bare, per pound, mill	.155	.153	.148	92.6	91.2	88.2
Lead, pig, per pound, New York	.047	.047	.047	106.8	106.8	106.8
Lead pipe, per 100 pounds, New York	5.390	5.390	5.467	106.1	106.1	107.6
Quicksilver, per pound, New York	.667	.653	.660	118.0	115.6	116.8
Silver, bar, fine, per ounce, New York	.659	.657	.648	107.5	107.3	105.9
Tin, pig, per pound, New York	.320	.305	.291	71.4	68.0	64.8
Zinc, sheet, per 100 pounds, factory	7.597	7.360	7.246	104.9	101.6	100.2
Zinc, slab, per pound, New York	.051	.049	.050	86.8	83.4	85.9
Building materials.						
(a) Lumber:						
Douglas Fir, per 1,000 feet, mill—						
No. 1 common	11.500	12.500	111.500	124.9	135.8	124.9
No. 2 and better	30.000	31.000	31.000	173.1	178.8	178.8
Gum, sap, firsts and seconds, per 1,000 feet, St. Louis	45.000	42.000	42.000	217.6	203.0	203.0
Hemlock, northern, No. 1, per 1,000 feet, Chicago	33.000	33.000	33.000	156.5	156.5	156.5
Maple, hard, No. 1 common, 4/4, per 1,000 feet, Chicago	49.500	49.500	49.500	164.2	164.2	164.2
Oak, white, plain No. 1 common, 4/4, per 1,000 feet, Cincinnati	60.700	57.500	58.750	164.1	155.4	158.9
Pine, white, No. 2 barn, per 1,000 feet, Buffalo, N. Y.	62.000	62.000	62.000	212.1	212.1	212.1
Pine, yellow, southern, mill, per 1,000 feet—						
Flooring, B and better	41.99	43.530	40.960	182.3	189.0	177.8
Timbers, square edge and sound	20.470	19.810	20.270	139.9	135.4	138.5
Poplar, No. 1 common, 4/4, per 1,000 feet, Cincinnati	57.500	57.500	58.750	174.2	174.2	177.8
Spruce, eastern, random, per 1,000 feet, Boston	32.600	31.000	31.000	150.4	143.0	143.0
Lath, yellow pine, No. 1, per 1,000, f. o. b. mill	4.360	4.280	4.270	143.4	140.7	140.5
Shingles—						
Cypress, 16 inches long, per 1,000, mill	5.750	5.750	5.750	162.4	162.4	162.4
Red cedar, 16 inches long, per 1,000, mill	2.990	2.910	2.920	152.0	148.0	148.5
(b) Brick, common building, per 1,000, f. o. b. yard, 82 producing localities	13.866	13.749	13.613	204.0	202.4	200.3
(c) Structural steel. (See Metals and metal products.)						

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1922—Continued.

Commodity.	Average prices.			Index numbers. (1913=100.)		
	January.	February.	March.	January.	February.	March.
Building materials—Concluded.						
(d) Other building materials:						
Cement, Portland, per barrel, f. o. b. plant, average of 6 plant prices	$1.741	$1.716	$1.708	167.5	165.2	164.5
Crushed stone, 1½", per cubic yard, New York	1.850	1.800	1.800	205.6	200.0	200.0
Gravel, per ton, f. o. b. pit, average of 22 plant prices	.941	.947	.916	190.4	191.5	185.2
Hollow tile, building, per block, Chicago	.082	.082	.082	128.3	128.3	128.3
Lime, common, lump, f. o. b. plant, average of 15 plant prices	8.590	8.537	8.675	208.1	206.8	210.2
Sand, building, f. o. b. pit, per ton, average of 26 plant prices	.638	.338	.602	167.6	167.6	158.2
Slate, roofing, per 100 square feet, f. o. b. quarry	10.025	9.500	9.500	216.8	205.4	205.4
Glass—						
Plate, 3 to 5 square feet, per square foot, New York	.400	.400	.400	169.0	169.0	169.0
Plate, 5 to 10 square feet, per square foot, New York	.500	.500	.500	157.1	157.1	157.1
Glass, window, American, f. o. b. works—						
Single, A, per 50 square feet	4.650	3.900	3.900	204.5	171.5	171.5
Single, B, per 50 square feet	4.275	3.420	3.420	192.5	154.0	154.0
Linseed oil, raw, per gallon, New York	.720	.818	.820	155.8	176.9	177.4
Putty, commercial, per pound, New York	.048	.048	.048	179.2	179.2	179.2
Rosin, common to good (B), per barrel, New York	5.353	5.325	5.188	111.1	110.6	107.7
Turpentine, southern, barrels, per gallon, New York	.909	.903	.869	212.4	210.9	203.2
White lead, American, in oil, per pound, New York	.123	.123	.123	181.2	181.2	181.2
Zinc oxide (white zinc), per pound, New York	.073	.073	.073	134.8	134.8	134.8
Pipe, cast iron. (See Metals and metal products.)						
Copper, sheet. (See Metals and metal products.)						
Copper wire. (See Metals and metal products.)						
Lead pipe. (See Metals and metal products.)						
Nails. (See Metals and metal products.)						
Reinforcing bars. (See Metals and metal products.)						
Roofing tin (terneplate). (See Metals and metal products.)						
Zinc, sheet. (See Metals and metal products.).						
Chemicals and drugs.						
(a) Chemicals:						
Acids, per pound, New York—						
Acetic, 28 per cent	.025	.025	.025	128.9	128.9	128.9
Muriatic, 20°	.014	.013	.013	107.7	99.2	96.2
Nitric, 42°	.066	.065	.065	135.9	133.2	133.2
Stearic, triple pressed	.105	.105	.105	79.2	79.2	79.2
Sulphuric, 66°	.008	.008	.008	80.0	80.0	80.0
Alcohol, per gallon, New York—						
Denatured, No. 5, 188 proof	.385	.348	.340	105.2	95.0	92.9
Wood, refined, 95 per cent	.550	.533	.540	115.0	111.3	112.9
Alum, lump, per pound, New York	.035	.035	.035	200.0	200.0	200.0
Ammonia, anhydrous, per pound, New York	.300	.300	.300	120.0	120.0	120.0
Bleaching powder, per 100 pounds, New York	2.125	2.000	1.738	180.0	169.5	147.2
Borax, crystals and granulated, per pound, New York	.055	.055	.055	146.7	146.7	146.7
Copper sulphate, 99 per cent crystals, per pound, New York	.056	.055	.054	108.1	105.8	103.6
Copra, South Sea. (See Foods.)						
Formaldehyde, per pound, New York	.101	.091	.090	120.2	108.2	106.7
Oil, vegetable—						
Coconut, crude. (See Foods.)						
Corn, crude. (See Foods.)						
Palm kernel, crude, per pound, New York	.085	.084	.088	84.2	83.6	86.6
Soya bean, crude. (See Foods.)						
Potash, caustic, 88–92 per cent, per pound, New York	.059	.055	.058	164.9	154.2	160.6
Sal soda, per 100 pounds, New York	1.400	1.400	1.400	233.3	233.3	233.3
Soda ash, 58 per cent, light, per 100 pounds, New York	2.038	1.925	1.900	349.3	330.0	325.7
Soda, bicarbonate, American, per pound, f. o. b. works	.020	.020	.020	200.0	200.0	200.0
Soda, caustic, 76 per cent solid, per pound, New York	.036	.035	.036	247.3	238.4	246.6
Soda, silicate of, 40°, per 100 pounds, New York	.850	.850	.850	133.8	133.8	133.8
Sulphur, crude, per gross ton, New York	15.000	14.000	14.000	68.2	63.6	63.6
Tallow, inedible, packers' prime, per pound, Chicago	.066	.066	.071	92.8	92.8	100.8
(b) Fertilizer materials:						
Acid phosphate, 16 per cent basis, bulk, per ton, New York	10.000	9.875	9.250	130.1	128.5	120.1
Ammonia sulphate, double bags, per 100 pounds, New York	2.675	2.850	3.188	85.7	91.2	101.9
Ground bone, steamed, per ton, Chicago	21.000	21.750	25.000	104.4	108.1	124.3

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1922—Continued.

Commodity.	Average prices.			Index numbers. (1913=100.)		
	January.	February.	March.	January.	February.	March.
Chemicals and drugs—Concluded.						
(b) Fertilizer materials—Concluded.						
Muriate of potash, 80-85 per cent, K. C. L. bags, per ton, New York	$33.600	$33.600	$33.600	88.4	88.4	88.4
Phosphate rock, 68 per cent, per ton, f. o. b. mines	3.250	3.250	3.188	95.4	95.4	93.5
Soda nitrate, 95 per cent, per 100 pounds, New York	2.350	2.406	2.813	95.2	97.5	113.9
Tankage, 9 and 20 per cent, crushed, per ton, f. o. b. Chicago	31.700	33.163	42.500	135.7	142.0	181.9
(c) Drugs and pharmaceuticals:						
Acid, citric, domestic, crystals, per pound, New York	.470	.450	.450	108.1	103.5	103.5
Acid, Tartaric, mfrs., crystals, U. S. P., per pound, New York	.315	.300	.300	103.2	98.3	98.3
Alcohol, grain, 190 proof, U. S. P., per gallon, New York	4.700	4.700	4.700	188.1	188.1	188.1
Cream of tartar, powdered, per pound, New York	.291	.265	.265	122.4	111.2	111.2
Epsom salts, U. S. P., in barrels, per 100 pounds, New York	2.500	2.500	2.500	227.3	227.3	227.3
Glycerine, refined, per pound, New York	.164	.165	.159	83.1	83.7	80.6
Opium, natural, U. S. P., per pound, New York	5.500	5.625	5.750	91.4	93.5	95.6
Peroxide of hydrogen, 4-ounce bottles, per gross, New York	7.500	7.500	7.500	187.5	187.5	187.5
Phenol, U. S. P. (carbolic acid), per pound, New York	.114	.115	.115	103.4	104.7	104.7
Quinine, sulphate, manufacturers, per ounce, New York	.600	.600	.600	273.2	273.2	273.2
House furnishing goods.						
(a) Furniture:						
Bedroom—						
Bed, combination, per bed, factory	37.250	37.250	37.250	165.6	165.6	165.6
Chair, all gum, cane seat, per chair, factory	5.250	5.250	5.250	233.3	233.3	233.3
Chifforette, combination, per chifforette, factory	44.000	44.000	44.000	135.4	135.4	135.4
Dresser, combination, per dresser, factory	54.000	54.000	54.000	150.0	150.0	150.0
Rocker, quartered oak, per chair, Chicago	4.410	4.410	4.410	215.3	215.3	215.3
Set, 3 pieces, per set, Chicago	36.309	36.309	36.309	191.4	191.4	191.4
Dining room—						
Buffet, combination, per buffet, factory	56.000	56.000	56.000	130.2	130.2	130.2
Chair, all gum, leather slip seat, per 6, factory	31.500	31.500	31.500	210.0	210.0	210.0
Table, extension, combination, per table, factory	34.000	33.500	33.500	183.8	181.1	181.1
Living room—						
Davenport, standard pattern, per davenport, factory	61.500	61.500	61.500	178.3	178.3	178.3
Table, library, combination, per table, factory	34.000	34.000	34.000	170.0	170.0	170.0
Kitchen—						
Chair, hardwood, per dozen, Chicago	15.288	14.700	14.700	240.0	230.8	230.8
Refrigerator, lift top type, each, factory	16.200	16.200	16.200	156.8	156.8	156.8
Table, with drawer, per table, Chicago	3.773	3.773	3.773	265.5	265.5	265.5
(b) Furnishings:						
Carpets, per yard, factory—						
Bigelow Axminster	2.784	2.784	2.784	207.9	207.9	207.9
Brussels, Bigelow	2.736	2.736	2.736	211.8	211.8	211.8
Wilton, Bigelow	4.608	4.608	4.608	191.4	191.4	191.4
Cutlery—						
Carvers, 8-inch, per pair, factory	1.200	1.200	1.200	160.0	160.0	160.0
Knives and forks, per gross, factory	12.000	12.000	12.000	208.7	208.7	208.7
Pails, galvanized iron, 10-quart, per gross, factory	20.194	19.571	19.000	137.7	133.5	129.5
Sheeting, bleached, 10/4—						
Pepperell, per yard, New York	(1)	.496	.450	(1)	207.3	187.9
Wamsutta, per yard, factory	.959	.959	.932	294.4	294.4	286.0
Tableware—						
Glass nappies, 4-inch, per dozen, factory	.300	.300	.300	272.7	272.7	272.7
Glass pitchers, per dozen, factory	1.820	1.820	1.820	227.5	227.5	227.5
Glass tumblers, one-third pint, per dozen, factory	.200	.200	.200	166.7	166.7	166.7
Plates, white granite, 7-inch, per dozen, factory	.980	.980	.980	211.5	211.5	211.5
Tea cups and saucers, white granite, per dozen, factory	1.260	1.260	1.260	221.0	221.0	221.0
Tubs, galvanized iron, No. 3, per dozen, factory	6.113	5.827	5.500	148.9	141.9	133.9
Miscellaneous.						
(a) Cattle feed:						
Bran, per ton, Minneapolis	20.750	25.063	23.781	113.0	136.5	129.5
Cottonseed meal, prime, per ton, New York	44.750	45.250	50.750	141.6	143.2	160.6
Linseed meal, per ton, New York	50.500	51.000	54.000	177.7	179.5	190.0
Mill-feed middlings, standard, per ton, Minneapolis	20.250	25.375	25.375	104.1	130.5	130.5

[1] No quotation.

WHOLESALE PRICES OF COMMODITIES, JANUARY TO MARCH, 1922—Concluded.

Commodity.	Average prices.			Index numbers. (1913=100.)		
	January.	February.	March.	January.	February.	March.
Miscellaneous—Concluded.						
(*b*) Leather:						
Calf, chrome, B grade, per square foot, Boston	$0.465	$0.465	$0.425	172.5	172.5	157.6
Glazed kid, black, top grade, per square foot, Boston	.700	.700	.700	279.6	279.6	279.6
Harness, Cal. oak, No. 1, per pound, Chicago	.421	.421	.402	105.0	105.0	100.1
Side, black, chrome, B grade, per square foot, Boston	.260	.260	.260	101.6	101.6	101.6
Sole, per pound, Boston—						
Hemlock, middle No. 1	.340	.350	.350	120.5	124.1	124.1
Oak, scoured backs, heavy	.525	.525	.525	117.0	117.0	117.0
Union, middle weight	.500	.480	.480	124.6	119.6	119.6
(*c*) Paper and pulp:						
Paper—						
Newsprint, rolls, per pound, f. o. b. mill	.035	.035	.035	169.2	169.2	169.2
Wrapping, manila, No. 1, jute, per pound, New York	.088	.088	.088	179.3	179.3	179.3
Wood pulp, sulphite, domestic, unbleached, per 100 pounds, New York	2.545	2.525	2.525	114.4	113.5	113.5
(*d*) Other miscellaneous:						
Hemp, manila, fair current shipment, per pound, New York	.083	0.79	.076	89.8	84.9	82.2
Jute, raw, medium grades, per pound, New York	.055	.053	.053	82.2	78.5	78.5
Lubricating oil, paraffin, 903 gravity, per gallon, New York	.230	.230	.230	161.4	161.4	161.4
Rope, pure manila, best grade, per pound, New York	.188	.188	.188	127.8	127.8	127.8
Rubber, Para, island, fine, per pound, New York	.193	.163	.161	23.9	20.2	19.9
Sisal, Mexican, current shipment, per pound, New York	[3] .066	[3] .066	[3] .071	152.1	153.2	163.7
Soap—						
Laundry, per 100 cakes, Cincinnati	3.564	3.564	3.564	128.4	128.4	128.4
Laundry, per 100 cakes, Philadelphia	4.900	4.900	4.900	138.9	138.9	138.9
Starch, laundry, bulk, per pound, New York	.051	.051	.051	140.5	140.5	140.5
Tobacco—						
Plug, per pound, New York	.701	.701	.701	180.2	180.2	180.2
Smoking, per gross 1-ounce bags, New York	9.920	9.920	9.920	175.9	175.9	175.9

[3] Estimated.

Changes in Cost of Living in the United States.

THE Bureau of Labor Statistics has secured data on cost of living for March, 1922, the results of which are shown in the following tables. The information is based on actual prices secured from merchants and dealers for each of the periods named. The prices of food and fuel and light in each city are furnished the Bureau of Labor Statistics in accordance with arrangements made with establishments through personal visits of the bureau's agents. In each city food prices are secured from 15 to 25 merchants and dealers, and fuel and light prices from 10 to 15 firms, including public utilities. All other data are secured by special agents of the bureau who visit the various merchants, dealers, and agents, and secure the figures directly from their records. Four quotations are secured in each city (except in Greater New York where five are obtained), on each of a large number of articles of clothing, furniture, and miscellaneous items. Rental figures are secured for from 300 to 1,800 houses and apartments in each city, according to its population.

Table 1 shows the decreases in the total cost of living from June, 1920, and December, 1921, respectively, to March, 1922, in 32 cities, and in the United States, as determined by a consolidation of the figures for the 32 cities.

The decrease from September to December, 1921, was

TABLE 1.—DECREASE IN TOTAL COST OF LIVING IN SPECIFIED CITIES FROM JUNE, 1920, AND FROM DECEMBER, 1921, TO MARCH, 1922.

City.	Per cent of decrease from—		City	Per cent of decrease from—	
	June, 1920, to March, 1922.	December, 1921, to March, 1922.		June, 1920, to March, 1922.	December, 1921, to March, 1922.
Atlanta, Ga	22.4	4.1	New Orleans, La	15.5	2.3
Baltimore, Md	21.7	3.1	New York, N. Y	22.5	5.2
Birmingha, Ala	21.8	4.5	Norfolk, Va	22.9	4.4
Boston, Mass	23.5	5.3	Philadelphia, Pa	21.2	3.5
Buffalo, N. Y	23.3	3.9	Pittsburgh, Pa	21.3	4.4
Chicago, Ill	23.1	4.2	Portland, Me	22.6	5.0
Cincinnati, Ohio	24.0	3.0	Portland, Oreg	24.0	3.8
Cleveland, Ohio	23.3	5.8	Richmond, Va	21.5	4.6
Denver, Colo	21.2	4.8	St. Louis, Mo	23.0	3.2
Detroit, Mich	26.0	4.3	San Francisco and Oakland, Calif	19.6	3.7
Houston, Tex	21.2	3.7	Savannah, Ga	25.1	5.6
Indianapolis, Ind	23.2	3.4	Scranton, Pa	20.5	4.7
Jacksonville, Fla	22.4	4.1	Seattle, Wash	20.5	2.4
Kansas City, Mo	23.6	5.9	Washington, D. C	22.1	3.8
Los Angeles, Calif	14.5	2.3			
Memphis, Tenn	18.6	3.2	United States	22.9	4.2
Minneapolis, Minn	18.4	3.1			
Mobile, Ala	21.7	4.8			

Table 2 shows the changes from December, 1914, to March, 1922, by specified periods in 19 cities.

In studying this and the following tables it should be borne in mind that the figures for the 19 cities in Table 2 are based on the prices prevailing in December, 1914, the figures for the 13 cities in Table 3 are based on the prices prevailing in December, 1917, while the figures for the United States, shown in Table 4, are a summarization of the figures in Tables 2 and 3, computed on a 1913 base.

It will be noted that from the beginning of the studies to June, 1920, there was, with an occasional exception, a steady increase in prices becoming much more decided during the latter part of that period. From June to December, 1920, however, there was an appreciable drop in the figures representing the combined expenditures. While rents and fuel and light continued to advance considerably and miscellaneous items to a less extent, the large decrease in food and clothing and the somewhat smaller decrease in furniture and house furnishings had the effect of reducing the totals for December by from 2.5 to 10 per cent in the several cities below the price for June. The figures for the period from December, 1920, to May, 1921, show a larger decrease than the previous six-month period, ranging from 7.2 to 11.9 per cent. The small decrease in furniture and furnishings and the increase in fuel and light shown in the period from June to December, 1920, were changed to decided decreases in the period from December, 1920, to May, 1921, while the rapid decrease in food and clothing shown in the former period continued. However, housing made an appreciable advance while miscellaneous items increased only slightly.

In the period from May to September, 1921, the downward movement was not so rapid as during the two previous periods, the decreases ranging from nothing to 3.8 per cent, while the average for the United States was 1.7 per cent.

The decrease from September to December, 1921, was also slight, ranging from nothing to 3 per cent, the average for the United States again being 1.7 per cent.

The decrease from December, 1921, to March, 1922, was more decided, ranging from 2.3 per cent to 5.9 per cent, the average for the United States being 4.2.

TABLE 2.—CHANGES IN COST OF LIVING IN 19 CITIES FROM DECEMBER, 1914, TO MARCH, 1922.

Baltimore, Md.

Item of expenditure.	Per cent of increase from December, 1914, to—											
	Dec., 1915.	Dec., 1916.	Dec., 1917.	Dec., 1918.	June, 1919.	Dec., 1919.	June, 1920.	Dec., 1920.	May, 1921.	Sept., 1921.	Dec., 1921.	Mar., 1922.
Food	[1] 4.1	20.9	64.4	96.4	91.1	92.5	110.9	75.6	43.4	48.6	46.9	38.3
Clothing	2.7	24.0	52.1	107.7	128.9	177.4	191.3	159.5	123.2	101.5	88.6	82.0
Housing	[1] .2	.9	3.0	13.8	16.8	25.8	41.6	49.5	63.0	64.0	64.7	65.2
Fuel and light	.5	9.1	25.5	46.0	37.1	48.1	57.6	79.0	70.9	84.9	85.5	85.5
Furniture and furnishings	5.6	26.4	60.8	122.3	134.6	167.0	191.8	181.9	147.5	128.7	123.7	115.0
Miscellaneous	[1] 1.4	18.5	51.3	78.7	82.8	99.4	111.4	112.9	111.8	112.2	108.6	106.9
Total	[1] 1.4	18.5	51.3	84.7	84.0	98.4	114.3	96.8	77.4	76.5	73.2	67.9

Boston, Mass.

Food	[1] 0.3	18.0	45.8	74.9	67.9	80.8	105.0	74.4	41.9	52.1	50.4	34.3
Clothing	6.6	21.9	47.5	117.5	137.9	192.4	211.1	192.7	150.3	118.8	106.3	98.9
Housing	[1] .1	.1	[1] .1	2.8	5.1	12.2	16.2	25.8	29.8	31.6	33.8	33.9
Fuel and light	1.1	10.5	29.2	56.6	55.0	63.2	83.6	106.0	97.8	94.4	98.5	93.9
Furniture and furnishings	8.4	26.3	58.4	137.6	153.7	198.7	233.7	226.4	171.2	139.5	136.9	128.1
Miscellaneous	1.6	15.7	38.1	62.0	64.8	81.1	91.8	96.6	96.2	94.6	93.0	91.6
Total	1.6	15.7	38.1	70.6	72.8	92.3	110.7	97.4	74.4	72.8	70.2	61.2

Buffalo, N. Y.

Food	2.4	30.1	64.1	87.8	82.9	94.7	115.7	78.5	37.7	49.9	50.8	39.4
Clothing	8.9	29.6	58.5	123.1	140.7	190.8	210.6	168.7	131.6	102.4	96.5	87.7
Housing	1.2	4.7	9.4	20.7	28.0	29.0	46.6	48.5	61.1	61.7	61.7	61.9
Fuel and light	1.3	9.3	23.5	49.3	51.9	55.7	69.8	74.9	73.9	79.5	79.7	78.8
Furniture and furnishings	7.1	24.1	50.2	106.3	118.1	165.4	199.7	189.2	151.3	130.9	124.7	115.5
Miscellaneous	3.5	24.4	51.1	76.0	78.7	90.3	101.9	107.4	107.8	105.7	103.0	99.5
Total	3.5	24.4	51.1	80.9	84.2	102.7	121.5	101.7	80.3	78.4	76.8	69.9

Chicago, Ill.

Food	2.7	25.2	53.4	78.7	73.3	93.1	120.0	70.5	41.9	51.3	48.3	38.3
Clothing	7.5	24.2	50.6	138.9	157.1	224.0	205.3	158.6	122.7	86.0	74.3	66.8
Housing	[1] .1	.7	1.4	2.6	8.0	14.0	35.1	48.9	78.2	79.8	83.9	84.1
Fuel and light	[1] .9	6.6	19.3	37.1	35.7	40.1	62.4	83.5	65.3	67.1	69.4	54.8
Furniture and furnishings	5.9	20.0	47.5	108.9	126.9	176.0	215.9	205.8	162.4	138.0	133.7	114.5
Miscellaneous	3.0	19.5	41.8	58.7	61.7	84.3	87.5	96.5	98.5	97.5	94.5	92.7
Total	3.0	19.5	41.8	72.2	74.5	100.6	114.6	93.3	78.4	75.3	72.3	65.1

TABLE 2.—CHANGES IN COST OF LIVING IN 19 CITIES FROM DECEMBER, 1914, TO MARCH, 1922.

Cleveland, Ohio.

Item of expenditure.	Per cent of increase from December, 1914, to—											
	Dec., 1915.	Dec., 1916.	Dec., 1917.	Dec., 1918.	June, 1919.	Dec., 1919.	June, 1920.	Dec., 1920.	May, 1921.	Sept., 1921.	Dec., 1921.	Mar., 1922.
Food	1.4	26.4	54.3	79.4	79.7	92.9	118.7	71.7	37.4	47.7	40.9	29.8
Clothing	2.0	18.0	43.7	102.6	125.2	171.2	185.1	156.0	124.0	90.8	85.8	77.4
Housing	.1	.9	11.3	16.5	21.8	39.9	47.3	80.0	88.1	82.8	81.2	72.0
Fuel and light	.3	10.0	26.8	51.9	47.9	62.9	90.3	94.5	89.6	91.9	103.8	102.2
Furniture and furnishings	4.7	19.7	47.8	102.4	117.0	112.3	129.1	121.3	86.8	67.9	60.5	50.5
Miscellaneous	1.4	19.1	42.9	67.1	74.7	85.9	117.9	134.0	129.6	123.4	123.2	111.1
Total	1.4	19.1	42.9	71.4	77.2	95.1	116.8	104.0	84.7	79.9	76.4	66.2

Detroit, Mich.

Food	4.1	26.5	59.7	82.5	86.4	99.5	132.0	75.6	41.1	54.3	47.3	36.5
Clothing	2.3	18.9	46.7	113.8	125.2	181.8	208.8	176.1	134.1	99.9	92.5	82.7
Housing	2.1	17.5	32.6	39.0	45.2	60.2	68.8	108.1	101.4	96.6	91.1	88.0
Fuel and light	1.6	9.9	30.2	47.6	47.6	57.9	74.9	104.5	83.6	81.9	77.5	74.0
Furniture and furnishings	8.7	24.5	50.4	107.3	129.3	172.6	206.7	184.0	134.0	102.9	96.8	82.6
Miscellaneous	3.5	22.3	49.9	72.6	80.3	100.1	141.3	144.0	140.1	131.9	130.7	126.3
Total	3.5	22.3	49.9	78.0	84.4	107.9	136.0	118.6	93.3	88.0	82.4	74.6

Houston, Tex.

Food	[1] 1.0	19.9	57.3	86.1	85.7	97.5	107.5	83.2	45.6	49.7	50.1	40.2
Clothing	2.7	25.0	51.5	117.3	134.8	192.0	211.3	187.0	143.4	111.5	104.9	98.8
Housing	[1] 2.3	[1] 7.3	[1] 7.7	[1] 1.7	1.9	13.4	25.3	35.1	39.4	39.4	39.8	39.5
Fuel and light	[1] .9	8.3	22.7	47.5	37.6	60.0	55.1	74.2	46.0	39.0	39.4	34.4
Furniture and furnishings	6.1	29.6	62.3	119.9	144.5	181.8	213.9	208.2	173.7	156.7	148.2	137.5
Miscellaneous	[1] .3	16.4	44.9	67.6	72.3	88.2	90.4	103.9	100.8	100.0	99.0	96.0
Total	[1] .3	16.4	44.9	75.7	80.2	101.7	112.2	104.0	79.7	75.0	73.6	67.2

Jacksonville, Fla.

Food	[1] 0.3	17.6	50.8	76.2	74.2	80.9	90.1	65.6	32.6	43.1	40.6	30.0
Clothing	10.5	33.7	71.9	130.5	139.8	217.2	234.0	209.3	167.5	131.1	117.9	104.8
Housing	[1] 6.9	[1] 18.2	[1] 18.7	5.9	9.7	22.0	28.9	34.1	36.5	37.7	38.3	37.6
Fuel and light	(2)	2.3	15.1	55.2	49.2	64.1	72.6	92.6	80.7	68.1	68.9	61.6
Furniture and furnishings	15.1	43.4	73.7	126.5	140.0	186.2	224.2	222.3	182.7	140.9	134.9	122.0
Miscellaneous	1.3	14.7	41.6	60.5	65.9	80.9	102.8	105.6	107.5	100.9	99.3	98.7
Total	1.3	14.7	41.6	71.5	77.5	101.5	116.5	106.2	85.8	78.7	75.1	68.0

Los Angeles, Calif.

Food	[1] 4.1	0.4	33.4	61.8	60.7	71.0	90.8	62.7	33.2	39.3	38.4	27.5
Clothing	2.8	14.3	45.0	109.1	123.3	167.6	184.5	166.6	127.4	98.3	94.3	84.4
Housing	[1] 2.7	[1] 2.5	[1] .6	4.4	8.7	26.8	42.6	71.4	85.3	86.0	90.1	96.0
Fuel and light	.4	2.3	10.4	18.3	18.6	35.3	53.5	53.5	52.7	52.7	52.7	48.4
Furniture and furnishings	6.3	23.1	56.4	118.5	134.2	175.5	202.2	202.2	156.6	148.4	143.2	133.7
Miscellaneous	[1] 1.9	7.7	28.9	52.0	59.1	76.9	86.6	100.6	96.8	98.8	99.6	104.0
Total	[1] 1.9	7.7	28.9	58.0	65.1	85.3	101.7	96.7	78.7	76.8	76.4	72.4

[1] Decrease.

TABLE 2.—CHANGES IN COST OF LIVING IN 19 CITIES FROM DECEMBER, 1914, TO MARCH, 1922—Continued.

Mobile, Ala.

Item of expenditure.	Per cent of increase from December, 1914, to—											
	Dec., 1915.	Dec., 1916.	Dec., 1917.	Dec., 1918.	June, 1919.	Dec., 1919.	June, 1920.	Dec., 1920.	May, 1921.	Sept., 1921.	Dec., 1921.	Mar., 1922.
Food	[1] 1.0	19.9	57.3	80.6	83.6	98.4	110.5	73.5	39.1	43.7	42.4	32.3
Clothing	2.0	9.0	38.8	86.0	94.0	123.7	137.4	122.2	90.6	68.1	57.7	56.3
Housing	[1] 1.9	[1] 4.3	[1] 3.6	11.2	11.9	29.6	34.6	53.6	53.3	53.1	49.9	48.4
Fuel and light	([2])	8.8	27.1	57.1	66.6	75.6	86.3	122.3	102.1	97.2	98.2	86.1
Furniture and furnishings	4.1	15.3	42.8	108.3	113.9	163.3	177.9	175.4	140.7	124.3	116.9	98.2
Miscellaneous	[1] .4	13.8	43.2	72.4	75.3	87.0	100.3	100.7	96.9	96.1	94.3	89.6
Total	[1] .4	13.8	43.2	71.4	76.6	94.5	107.0	93.3	70.8	67.2	63.6	55.8

New York, N. Y.

Food	1.3	16.3	55.3	82.6	75.3	91.0	105.3	73.5	42.5	50.3	51.8	36.5
Clothing	4.8	22.3	54.2	131.3	151.6	219.7	241.4	201.8	159.5	131.5	117.8	107.1
Housing	[1] .1	[1] .1	2.6	6.5	13.4	23.4	32.4	38.1	42.2	44.0	[3] 53.7	54.5
Fuel and light	[1] .1	11.0	19.9	45.5	45.4	59.6	69.1	87.5	95.9	92.4	90.7	89.4
Furniture and furnishings	8.4	27.6	56.5	126.5	136.6	172.9	205.1	185.9	156.5	136.7	132.0	122.3
Miscellaneous	2.0	14.9	44.7	70.0	75.1	95.8	111.9	116.3	117.6	117.8	116.9	113.2
Total	2.0	14.9	44.7	77.3	79.2	103.8	119.2	101.4	81.7	79.7	79.3	69.9

Norfolk, Va.

Food	0.8	22.4	63.9	86.2	89.8	91.5	107.6	76.3	45.4	50.2	43.4	31.9
Clothing	.8	6.0	31.6	94.6	104.8	158.4	176.5	153.6	121.6	93.9	90.2	81.8
Housing	.1	[1] 1.7	[1] 1.7	39.0	46.5	63.3	70.8	90.8	94.6	94.6	93.4	91.7
Fuel and light	([2])	17.0	33.3	74.6	69.7	89.9	110.6	128.9	97.3	98.1	91.6	93.5
Furniture and furnishings	.6	8.7	39.0	105.5	110.7	143.6	165.0	160.5	129.0	110.5	106.1	95.9
Miscellaneous	.6	14.7	45.2	76.8	83.7	97.5	108.4	106.3	106.3	112.5	109.3	102.6
Total	.6	14.7	45.2	80.7	87.1	107.0	122.2	109.0	88.1	83.9	79.2	71.3

Philadelphia, Pa.

Food	0.3	18.9	54.4	80.7	75.5	87.2	101.7	68.1	37.8	44.6	43.9	34.4
Clothing	3.6	16.0	51.3	111.2	135.9	190.3	219.6	183.5	144.7	112.2	104.6	96.2
Housing	[1] .3	[1] .7	2.6	8.0	11.3	16.7	28.6	38.0	44.2	47.1	48.4	48.7
Fuel and light	[1] .8	5.4	21.5	47.9	43.3	51.3	66.8	96.0	85.6	89.3	92.0	89.7
Furniture and furnishings	6.9	19.9	49.8	107.7	117.8	162.8	187.4	183.4	135.5	109.1	101.6	91.7
Miscellaneous	1.2	14.7	43.8	67.5	71.2	88.6	102.8	122.3	119.2	116.4	116.2	113.8
Total	1.2	14.7	43.8	73.9	76.2	96.5	113.5	100.7	79.8	76.0	74.3	68.2

Portland, Me.

Food	[1] 2.0	18.6	49.8	85.8	80.6	91.9	114.5	78.7	46.7	56.8	54.8	33.2
Clothing	2.1	9.7	32.8	85.8	103.8	148.5	165.9	147.8	116.3	96.6	88.1	81.0
Housing	.2	.6	2.4	2.5	5.7	10.7	14.5	20.0	23.1	23.3	26.6	27.0
Fuel and light	.4	11.4	28.9	67.7	58.4	69.8	83.9	113.5	96.8	90.9	94.0	93.8
Furniture and furnishings	6.2	20.9	43.5	110.8	126.4	163.7	190.3	191.2	152.2	139.1	123.6	116.6
Miscellaneous	[1] .4	13.8	38.0	65.6	72.1	83.2	89.4	94.3	94.1	94.1	91.2	89.5
Total	[1] .4	13.8	38.0	72.2	74.3	91.6	107.6	93.1	72.1	72.0	69.2	60.7

[1] Decrease.
[2] No change.
[3] This number (53.7) is a revised per cent based in part upon additional data secured in Greater New York. While the difference between 44.0 and 53.7 does not represent the change in rents between September and December, 1921, the latter figure is a correct statement of the increase from December, 1914, to December, 1921.

TABLE 2.—CHANGES IN COST OF LIVING IN 19 CITIES FROM DECEMBER, 1921, TO MARCH, 1922—Concluded.

Portland, Oreg.

Item of expenditure.	Per cent of increase from December, 1914, to—											
	Dec., 1915.	Dec., 1916.	Dec., 1917.	Dec., 1918.	June, 1919.	Dec., 1919.	June, 1920.	Dec., 1920.	May, 1921.	Sept., 1921.	Dec., 1921.	Mar., 1922.
Food	[1] 3.8	9.8	42.2	70.6	67.1	81.6	107.1	60.9	26.0	35.9	33.1	24.6
Clothing	3.0	15.8	44.4	96.6	115.5	142.1	158.6	122.1	91.2	70.4	65.3	55.5
Housing	[1] 10.9	[1] 19.6	[1] 22.2	12.3	20.2	27.7	33.2	36.9	42.9	43.3	43.3	43.2
Fuel and light	[1] 1.0	3.4	20.2	30.9	31.3	42.3	46.9	65.9	67.1	58.9	59.4	56.2
Furniture and furnishings	2.9	18.0	54.5	109.0	122.1	145.1	183.9	179.9	148.0	126.9	121.9	104.6
Miscellaneous	[1] 3.1	6.1	31.2	57.9	62.3	71.6	79.7	81.1	81.1	80.9	80.0	78.9
Total	[1] 3.1	6.1	31.2	64.2	69.2	83.7	100.4	80.3	62.2	60.5	58.3	52.3

San Francisco and Oakland, Calif.

Food	[1] 4.3	9.6	35.9	66.2	63.3	74.2	93.9	64.9	33.3	40.6	40.4	29.6
Clothing	2.5	14.5	43.6	109.0	134.6	170.4	191.0	175.9	140.9	110.1	106.3	97.8
Housing	[1] .7	[1] 2.5	[1] 4.0	[1] 3.9	[1] 3.5	4.7	9.4	15.0	21.7	23.6	25.8	27.7
Fuel and light	[1] .1	4.6	14.4	30.1	28.9	41.3	47.2	66.3	63.3	65.3	65.3	65.3
Furniture and furnishings	6.0	21.7	48.2	103.4	116.6	143.8	180.1	175.6	143.9	121.7	113.9	105.6
Miscellaneous	[1] 1.7	8.3	28.6	50.5	61.0	74.7	79.6	84.8	84.4	87.4	86.8	84.4
Total	[1] 1.7	8.3	28.6	57.8	65.6	87.8	96.0	85.1	66.7	64.6	63.6	57.5

Savannah, Ga.

Food	[1] 0.3	17.6	50.8	76.2	74.2	80.9	91.7	63.5	28.7	36.8	33.7	16.7
Clothing	.8	24.1	56.6	133.6	146.3	195.9	212.1	171.5	133.2	101.3	84.2	74.1
Housing	[1] 1.4	[1] 3.0	[1] 4.3	5.9	10.2	22.0	33.5	58.6	61.9	60.6	60.9	58.8
Fuel and light	[1] 1.3	[1] 1.7	[1] 21.1	37.5	35.5	52.2	65.3	94.4	74.2	66.4	66.1	65.3
Furniture and furnishings	1.8	12.8	50.7	128.6	136.5	182.1	207.2	206.6	175.9	150.2	133.7	126.0
Miscellaneous	[1] .2	14.5	42.5	67.3	71.2	82.0	83.8	91.5	93.0	88.0	87.4	84.6
Total	[1] .2	14.6	42.5	75.0	79.8	98.7	109.4	98.7	77.6	71.3	66.2	56.9

Seattle, Wash.

Food	[1] 2.8	8.5	38.7	72.5	69.3	80.9	102.3	54.1	27.1	34.9	30.5	27.1
Clothing	1.2	11.3	36.4	88.0	110.2	154.5	173.9	160.5	128.7	93.5	88.7	79.8
Housing	[1] 2.4	[1] 5.4	[1] .6	44.3	51.5	71.5	74.8	76.7	74.8	71.3	69.2	67.0
Fuel and light	[1] .2	2.9	23.9	51.8	51.8	63.8	65.8	78.7	78.7	77.3	69.0	66.8
Furniture and furnishings	8.5	27.4	52.3	141.5	154.4	201.0	221.2	216.4	177.2	151.7	149.9	142.4
Miscellaneous	[1] 1.0	7.4	31.1	58.5	71.4	86.8	90.4	95.5	105.5	105.5	102.6	99.2
Total	[1] 1.0	7.4	31.1	69.9	76.9	97.7	110.5	94.1	80.2	75.5	71.5	67.4

Washington, D. C.

Food	0.6	15.7	61.1	90.9	[4] 84.6	[5] 93.3	108.4	79.0	47.4	59.1	51.1	40.8
Clothing	3.7	23.2	60.1	112.6	109.5	165.9	184.0	151.1	115.9	89.8	87.1	79.8
Housing	[1] 1.5	[1] 3.7	[1] 3.4	[1] 1.5	[1] 1.4	5.4	15.6	24.7	28.8	29.1	30.4	31.3
Fuel and light	[2]	7.3	24.9	40.9	41.8	42.8	53.7	68.0	57.1	57.6	49.9	47.1
Furniture and furnishings	6.3	30.5	72.1	127.4	126.0	159.3	196.4	194.0	149.0	132.1	122.4	110.4
Miscellaneous	.4	15.3	44.3	55.9	57.4	62.7	68.2	73.9	72.0	70.5	75.8	73.7
Total	1.0	14.6	47.3	73.8	71.2	87.6	101.3	87.8	67.1	66.2	63.0	56.8

[1] Decrease.
[2] No change.
[4] Figures in this column are for April, 1919.
[5] Figures in this column are for November, 1919.

Table 3 shows the changes in the cost of living from December, 1917, to March, 1922, in 13 cities. The table is constructed in the same manner as the preceding one and differs from it only in the base period, and in the length of time covered.

TABLE 3.—CHANGES IN COST OF LIVING IN 13 CITIES FROM DECEMBER, 1917, TO MARCH, 1922.

Atlanta, Ga.

Item of expenditure.	Per cent of increase from December, 1917, to—								
	Dec., 1918.	June, 1919.	Dec., 1919.	June, 1920.	Dec., 1920.	May, 1921.	Sept., 1921.	Dec., 1921.	Mar., 1922.
Food	19.0	18.0	27.9	34.0	12.8	[1] 8.9	[1] 5.8	[1] 7.2	[1] 11.9
Clothing	29.1	40.7	66.9	80.5	56.5	35.2	13.6	8.3	1.9
Housing	14.0	14.5	32.6	40.4	73.1	78.8	77.0	75.4	72.2
Fuel and light	17.0	17.9	30.8	61.0	66.8	56.1	46.6	43.7	34.8
Furniture and furnishings	24.9	30.1	49.9	65.0	58.4	38.0	25.3	23.0	16.1
Miscellaneous	14.8	21.5	31.7	34.6	39.7	40.5	39.4	39.7	36.1
Total	19.7	23.3	37.9	46.7	38.5	25.2	20.7	18.7	13.8

Birmingham, Ala.

Food	17.7	18.3	26.5	36.4	11.9	[1] 9.1	[1] 6.2	[1] 8.5	[1] 14.0
Clothing	23.9	29.8	57.6	66.4	45.1	24.8	6.7	[1] .4	[1] 5.2
Housing	8.1	12.8	34.9	40.3	68.5	77.4	76.5	70.9	67.5
Fuel and light	22.8	31.9	39.8	55.3	74.2	54.3	53.1	44.1	29.8
Furniture and furnishings	19.4	20.2	45.1	55.6	48.1	32.0	15.0	12.0	3.0
Miscellaneous	13.8	16.3	26.8	28.7	30.4	33.8	35.9	35.5	31.8
Total	17.0	19.8	34.3	41.9	33.3	22.1	19.6	16.2	11.0

Cincinnati, Ohio.

Food	15.3	18.1	22.9	38.7	10.3	[1] 7.4	[1] 2.2	[1] 8.3	[1] 12.4
Clothing	33.8	48.3	84.2	96.7	73.5	49.0	22.6	13.9	6.7
Housing	.2	.8	12.8	13.6	25.0	27.6	28.2	28.5	30.3
Fuel and light	10.0	5.6	11.0	26.9	34.1	15.7	15.6	42.4	35.6
Furniture and furnishings	25.7	30.5	51.1	75.5	66.7	39.7	25.2	22.3	16.7
Miscellaneous	20.4	21.8	40.3	47.6	53.4	52.3	48.2	47.3	44.4
Total	17.3	21.1	35.2	47.1	34.7	21.7	18.3	15.3	11.8

Denver, Colo.

Food	20.0	20.7	26.0	41.5	7.9	[1] 13.1	[1] 7.8	[1] 8.8	[1] 17.6
Clothing	40.1	53.2	82.1	96.8	78.3	53.9	33.7	27.7	18.3
Housing	12.8	21.8	33.5	51.9	69.8	76.9	80.1	82.6	84.4
Fuel and light	8.1	8.4	19.6	22.3	47.1	37.5	40.0	39.7	33.1
Furniture and furnishings	22.6	31.3	46.3	60.2	58.9	42.5	32.5	27.9	21.1
Miscellaneous	14.8	17.7	32.3	35.4	38.8	42.8	44.1	43.1	40.2
Total	20.7	25.3	38.2	50.3	38.7	26.9	26.1	24.5	18.5

Indianapolis, Ind.

Food	17.8	16.4	28.2	49.0	11.0	[1] 10.1	[1] 2.1	[1] 8.4	[1] 13.4
Clothing	32.4	40.1	73.8	87.9	72.3	45.8	21.5	16.2	10.9
Housing	1.6	2.6	11.6	18.9	32.9	37.4	41.4	43.8	42.2
Fuel and light	19.8	16.7	27.3	45.6	60.3	49.4	47.5	42.5	34.8
Furniture and furnishings	18.9	24.8	48.4	67.5	63.0	35.3	25.0	22.5	13.9
Miscellaneous	21.9	26.8	38.2	40.5	47.5	47.4	46.5	46.2	45.8
Total	19.1	21.1	36.5	50.2	37.6	23.9	22.6	19.3	15.3

[1] Decrease.

TABLE 3.—CHANGES IN COST OF LIVING IN 13 CITIES FROM DECEMBER,

TABLE 3.—CHANGES IN COST OF LIVING IN 13 CITIES FROM DECEMBER, 1917, TO MARCH, 1922—Continued.

Kansas City, Mo.

Item of expenditure.	Per cent of increase from December, 1917, to—								
	Dec., 1918.	June, 1919.	Dec., 1919.	June, 1920.	Dec., 1920.	May, 1921.	Sept., 1921.	Dec., 1921.	Mar., 1922.
Food	17.3	15.1	24.5	44.9	10.2	[1] 8.3	[1] 4.3	[1] 6.6	[1] 15.7
Clothing	40.7	44.7	89.9	104.5	76.3	52.3	27.9	24.1	17.4
Housing	5.4	6.7	26.0	29.4	63.9	65.0	66.2	69.7	64.8
Fuel and light	18.0	9.6	27.5	35.2	55.1	43.3	43.7	42.6	36.0
Furniture and furnishings	31.1	37.9	61.8	73.0	68.7	50.0	32.8	26.2	15.2
Miscellaneous	15.6	20.8	31.5	37.1	40.3	40.4	38.2	37.6	33.1
Total	19.6	20.6	38.2	51.0	39.5	27.3	23.9	22.5	15.3

Memphis, Tenn.

Food	20.3	22.7	28.4	38.8	7.0	[1] 14.2	[1] 9.2	[1] 11.2	[1] 16.1
Clothing	27.7	38.3	66.2	77.5	59.0	36.1	20.2	15.3	9.3
Housing	[2]	8.2	23.1	35.9	66.2	79.7	77.7	77.3	75.5
Fuel and light	26.8	23.4	34.1	49.7	105.4	64.5	66.1	67.1	61.8
Furniture and furnishings	25.4	30.7	53.2	67.1	53.9	29.9	19.2	14.7	8.9
Miscellaneous	16.1	20.9	28.3	38.8	43.2	42.9	42.2	42.3	39.9
Total	18.3	23.3	35.2	46.4	39.3	26.7	25.1	23.2	19.2

Minneapolis, Minn.

Food	17.7	21.4	34.1	50.0	13.0	[1] 7.9	[1] 3.5	[1] 4.9	[1] 10.0
Clothing	33.5	40.1	67.0	76.7	63.6	41.0	18.4	14.3	9.7
Housing	[1] .1	[1] 2.0	8.0	10.7	36.8	39.0	44.0	46.7	46.7
Fuel and light	14.7	13.4	22.4	36.9	60.3	52.8	50.5	50.2	43.7
Furniture and furnishings	18.1	23.6	45.6	65.5	65.8	43.3	30.5	27.9	21.9
Miscellaneous	12.3	15.9	25.4	31.3	37.6	37.9	37.3	37.4	34.5
Total	15.8	18.8	32.7	43.4	35.7	23.7	21.6	20.7	17.0

New Orleans, La.

Food	16.6	17.4	21.1	28.6	10.7	[1] 10.7	[1] 6.4	[1] 9.3	[1] 12.0
Clothing	36.8	48.8	83.2	94.9	69.4	45.0	29.2	24.9	18.9
Housing	[2]	.1	10.8	12.9	39.7	46.7	49.5	57.9	58.2
Fuel and light	19.7	20.8	24.7	36.3	41.5	29.2	36.2	40.4	31.8
Furniture and furnishings	23.8	30.0	57.7	75.9	63.9	47.7	30.7	28.5	20.8
Miscellaneous	15.9	17.5	35.1	42.8	57.1	58.2	61.0	60.2	59.1
Total	17.9	20.7	33.9	41.9	36.7	23.8	23.8	22.7	19.9

Pittsburgh, Pa.

Food	18.8	16.2	25.1	36.5	14.3	[1] 8.8	[1] 3.0	[1] 5.6	[1] 14.4
Clothing	35.9	45.3	82.8	91.3	75.4	50.7	27.2	23.6	19.3
Housing	7.6	13.5	15.5	34.9	35.0	55.5	55.5	55.3	55.3
Fuel and light	9.2	9.4	9.8	31.7	64.4	59.8	55.6	66.2	66.0
Furniture and furnishings	26.3	34.1	63.1	77.4	78.1	58.2	36.2	31.6	23.7
Miscellaneous	16.3	16.7	28.3	41.2	46.3	48.6	47.6	48.0	44.4
Total	19.8	21.8	36.2	49.1	39.3	27.7	24.4	22.8	17.4

[1] Decrease [2] No change.

TABLE 3.—CHANGES IN COST OF LIVING IN 13 CITIES FROM DECEMBER, 1917, TO MARCH, 1922—Concluded.

Richmond, Va.

Item of expenditure.	Per cent of increase from December, 1917, to—								
	Dec., 1918.	June, 1919.	Dec., 1919.	June, 1920.	Dec., 1920.	May, 1921.	Sept., 1921.	Dec., 1921.	Mar., 1922.
Food	20.5	20.6	23.1	36.1	11.9	[1] 7.4	[1] 1.0	[1] 2.9	[1] 10.2
Clothing	33.8	42.3	78.6	93.6	69.0	43.8	24.2	21.2	15.9
Housing	1.0	3.6	9.8	12.5	25.9	29.4	33.0	34.1	34.2
Fuel and light	11.8	11.4	18.7	36.1	62.2	47.1	46.7	46.8	36.7
Furniture and furnishings	26.3	28.6	55.9	75.4	70.0	48.8	36.0	33.0	28.1
Miscellaneous	9.0	13.5	24.0	32.4	36.0	38.7	38.4	38.4	35.5
Total	17.9	20.6	32.0	43.8	33.3	20.2	19.5	18.3	12.9

St. Louis, Mo.

Food	18.0	16.1	26.2	46.2	8.8	[1] 10.1	[1] 4.5	[1] 11.6	[1] 14.0
Clothing	32.4	39.3	78.1	89.7	70.0	43.8	21.2	17.2	9.1
Housing	2.7	3.8	16.8	29.8	42.4	52.5	61.2	63.8	64.1
Fuel and light	4.8	3.7	8.2	19.6	42.6	30.9	29.5	33.4	30.9
Furniture and furnishings	21.8	32.5	52.9	73.1	70.2	43.5	25.1	19.2	14.3
Miscellaneous	14.5	15.7	30.3	37.6	43.2	42.1	42.0	40.6	34.7
Total	16.7	17.9	34.2	48.9	35.4	23.1	22.0	18.5	14.7

Scranton, Pa.

Food	21.3	18.1	26.9	41.4	17.8	[1] 4.0	2.8	4.1	[1] 6.8
Clothing	34.4	49.6	82.1	97.7	76.5	54.3	31.3	29.1	25.2
Housing	.5	6.2	2.4	17.2	18.5	41.5	42.2	44.6	46.6
Fuel and light	24.7	25.7	31.5	43.5	67.3	62.8	64.8	67.1	65.8
Furniture and furnishings	27.0	35.6	48.9	62.8	62.0	48.6	34.6	30.7	25.7
Miscellaneous	21.4	24.9	34.7	47.9	50.4	54.6	53.8	52.4	50.1
Total	21.9	25.0	37.1	51.5	39.1	28.2	26.3	26.3	20.4

[1] Decrease.

The following table shows the changes in the cost of living in the United States from 1913 to March, 1922. These figures are a summarization of the figures in the 32 cities which appear in the preceding tables, computed on a 1913 base.

TABLE 4.—CHANGES IN COST OF LIVING IN THE UNITED STATES, 1913 TO MARCH, 1922.

Item of expenditure.	Per cent of increase from 1913 (average) to—											
	Dec., 1914.	Dec., 1915.	Dec., 1916.	Dec., 1917.	Dec., 1918.	June, 1919.	Dec., 1919.	June, 1920.	Dec., 1920.	May, 1921.	Sept., 1921.	Dec., 1921.	Mar., 1922.
Food	5.0	5.0	26.0	57.0	87.0	84.0	97.0	119.0	78.0	44.7	53.1	49.9	38.7
Clothing	1.0	4.7	20.0	49.1	105.3	114.5	168.7	187.5	158.5	122.6	92.1	84.4	75.5
Housing	[1]	1.5	2.3	.1	9.2	14.2	25.3	34.9	51.1	59.0	60.0	61.4	60.9
Fuel and light	1.0	1.0	8.4	24.1	47.9	45.6	56.8	71.9	94.9	81.6	80.7	81.1	75.8
Furniture and furnishings	4.0	10.6	27.8	50.6	113.6	125.1	163.5	192.7	185.4	147.7	124.7	118.0	106.2
Miscellaneous	3.0	7.4	13.3	40.5	65.8	73.2	90.2	101.4	108.2	108.8	107.8	105.8	103.3
Total	3.0	5.1	18.3	42.4	74.4	77.3	99.3	116.5	100.4	80.4	77.3	74.3	66.9

[1] No change.

Consumption of Food by Average Workingmen's Families.

THE following table shows the quantity of 128 articles of food consumed in one year by the average workingmen's families in the United States. In the fall of 1918 and the winter of 1919 the Bureau of Labor Statistics made a survey of the cost of living in 92 localities in the United States. Detailed information relating to income and expenditures were secured from 12,096 families. The data relating to food consist of the quantity of each of the articles named consumed by the families in one year, together with its cost. The figures from 196 of these families were to some extent defective in detail and the schedules of these families have been eliminated from this table, so that the figures here presented are based on returns from 11,900 families. These families averaged 4.9 persons.

The figures in the first column of this table are based on the average consumption of these families. Of course, not all members of the family consume the same quantity of food. Careful studies and comparisons of food consumption have led to the following assumption—that, as a rule, using the food consumed by an adult male (one 15 years of age or over) as a basis, the following table may be constructed:

Adult male	=	1.00
Adult female	=	.90
Child 11 to 14 years	=	.90
Child 7 to 10 years	=	.75
Child 4 to 6 years	=	.40
Child 3 years or under	=	.15

On this basis the families referred to contained an average of 3.33 equivalent "adult males," that is, in so far as the consumption of food was concerned they would eat as much as 3.33 males 15 years of age or over.

The second column of the table shows the quantity consumed per such person. The so-called "standard family" is one consisting of a husband, wife, and three children, a boy 11, a girl 6, and a child 2 years old.

The third column of this table shows the average quantity consumed per such standard family. No family included in the survey used all of the articles shown in this table.

The fourth column of the table shows the number of families using each specified article of food shown, the fifth column, the per cent of families using, and the sixth or last column shows the average quantity consumed by the families using such article. Thus we have two figures of consumption per family, the first column based on all families included in the study, and the last column the quantity consumed by the families using the particular article shown.

To illustrate just what we mean here and point perhaps to its industrial and commercial value let us consider the article of pies. First, only those pies that were bought by the families scheduled were so shown upon the schedule. It was found that slightly more than 12 per cent of the total number of families visited purchased "ready made" pies. The average number of pies purchased and consumed by the families actually buying was slightly over 33 pies

per year. However, when this is distributed over all the families the average is 4 pies a year.

Take the item of hominy or grits and the same situation occurs. Only 2,612 families out of the 11,900 families considered, or practically 22 per cent, use this article of food at all. The average consumption for those families using hominy is 41 pounds per year, but when this is spread over the entire number of families to get an average for all it shows but 9 pounds. These two items perhaps call attention to the industrial and commercial value of these figures as well as anything else.

In advocating broader use of these figures it is of course, assumed that on the average the wealthy and that portion of our population whose sources of income are rather outside of that designated as wage earning, produce in their own homes as great a proportion of the pies consumed as do the wage earners, and that by multiplying the number of families in the United States by four you will get about the possibility of sales of commercial pies, and that ultimately these figures will be used to determine quantity of production, when production shall be brought under such intelligent control as will supply enough without overproduction and consequent spasmodic rather than "cyclical" unemployment.

The unit of quantity is a pound, unless otherwise stated in the stub of the table, some articles such as milk, cream, etc., being almost universally purchased by the quart, other articles such as eggs and bananas, by the dozen, others such as celery and asparagus, by the bunch, etc.

The figures for the last item on the table, namely, lunches, show the average number of lunches per family, etc., puchased during the year.

QUANTITY OF SPECIFIED ARTICLES OF FOOD CONSUMED IN ONE YEAR BY WORKINGMEN'S FAMILIES.

[The unit of quantity is the pound unless otherwise stated.]

Article.	Average quantity of food consumed in one year per—					
				Family using.		
	Family.	Equivalent adult male.	Standard family.	Number of families using.	Per cent of families using.	Quantity.
Meats:						
Beef, fresh, steak	66.1	19.90	66.7	10,656	89.5	73.8
Beef, fresh, roast	59.9	18.06	60.5	9,512	79.9	75.0
Beef, fresh, stew	44.7	13.46	45.1	8,207	69.0	64.8
Beef, fresh, other	15.5	4.66	15.6	4,140	34.8	44.4
Beef, salt, corned	6.1	1.85	6.2	2,369	19.9	30.8
Beef, salt, dried	1.2	.37	1.2	1,904	16.0	7.7
Veal	16.2	4.89	16.4	5,776	48.5	33.4
Pork, fresh	40.5	12.22	40.9	9,237	77.6	52.2
Pork, salt, bacon	17.0	5.11	17.1	7,890	66.3	25.6
Pork, salt, ham and shoulder	19.9	6.01	20.1	6,605	55.5	35.9
Pork, salt, side, dry	7.7	2.32	7.8	2,444	20.5	37.5
Pork, salt, side, pickled	2.5	.76	2.5	881	7.4	33.9
Mutton, chops	5.0	1.49	5.0	2,354	19.8	25.0
Mutton, roast	6.2	1.86	6.2	2,116	17.8	34.7
Mutton, stew	6.1	1.85	6.2	2,142	18.0	34.2
Mutton, other	.1	.04	.1	37	.3	38.2
Poultry, hens	23.4	7.04	23.6	9,537	80.1	29.2

QUANTITY OF SPECIFIED ARTICLES OF FOOD CONSUMED IN ONE YEAR BY WORKINGMEN'S FAMILIES—Concluded.

QUANTITY OF SPECIFIED ARTICLES OF FOOD CONSUMED IN ONE YEAR BY WORKINGMEN'S FAMILIES—Continued.

Article.	Average quantity of food consumed in one year per—					
				Family using.		
	Family.	Equivalent adult male.	Standard family.	Number of families using.	Per cent of families using.	Quantity.
Meats—Continued.						
Poultry, other	3.1	.93	3.1	2,983	25.1	12.4
Sausage	16.5	4.97	16.6	7,749	65.1	25.3
Liver	8.9	2.68	9.0	6,194	52.1	17.1
Kidney	.8	.23	.8	624	5.2	14.7
Other meat, not canned	5.6	1.69	5.7	2,795	23.5	23.9
Beef, canned	.5	.14	.5	554	4.7	10.1
Pork, canned	.3	.10	.3	564	4.7	7.2
Ham, cooked	7.4	2.22	7.4	5,667	47.6	15.5
Tongue, cooked	.1	.04	.1	162	1.4	10.4
Other meat, cooked	11.6	3.48	11.7	5,123	43.1	26.9
Sea food:						
Fish, fresh	31.4	9.46	31.7	8,627	72.5	43.3
Fish, salt	4.4	1.32	4.4	2,564	21.5	20.3
Fish, canned, salmon	8.8	2.64	8.8	7,230	60.8	14.4
Fish, canned, other	1.5	.44	1.5	2,465	20.7	7.1
Oysters—quart	2.4	.71	2.4	4,599	38.6	6.1
Other sea food	1.5	.46	1.5	1,266	10.3	14.4
Milk and milk products:						
Milk, not skimmed—quart	324.0	97.59	326.9	10,552	88.7	365.3
Milk, skimmed—do	2.0	.61	2.0	149	1.3	162.2
Milk, condensed or evaporated	62.2	18.74	62.8	7,196	60.5	102.9
Buttermilk—quart	37.6	11.32	37.9	4,191	35.2	106.7
Cream—do	1.5	.45	1.5	1,955	16.4	9.2
Ice cream—do	6.2	1.87	6.3	8,460	71.1	8.8
Butter	67.5	20.33	68.1	10,236	86.0	78.5
Cheese, ordinary American	12.0	3.62	12.1	8,875	74.6	16.1
Cheese, other	2.7	.82	2.7	2,037	17.1	15.9
Oleo	16.7	5.03	16.9	3,162	26.6	62.9
Other butter substitutes	4.5	1.36	4.6	906	7.6	59.1
Vegetable cooking and table oils	3.2	.97	3.2	2,559	21.5	14.9
Lard	36.6	11.04	37.0	7,558	63.5	57.7
Lard, compound	13.3	4.00	13.4	2,167	18.2	72.9
Lard, substitutes	10.2	3.06	10.3	2,647	22.2	45.7
Eggs—dozen	61.2	18.42	61.7	11,812	99.3	61.6
Grain products:						
Flour, wheat	260.1	78.37	262.5	11,582	97.3	267.3
Flour, rye	7.7	2.33	7.8	1,881	15.8	48.9
Flour, other	36.9	11.12	37.3	7,589	63.8	57.9
Corn meal	69.4	20.90	70.0	10,020	84.2	82.4
Hominy or grits	9.0	2.72	9.1	2,612	21.9	41.1
Cornstarch	4.5	1.36	4.6	7,364	61.9	7.3
Breakfast foods—						
Wheat	6.2	1.87	6.3	3,640	30.6	20.3
Corn	5.9	1.77	5.9	4,683	39.4	14.9
Oats	39.6	11.94	40.0	9,925	83.4	47.5
Other	.7	.22	.7	778	6.5	11.0
Bread, wheat	396.7	119.52	400.4	10,803	90.8	437.0
Bread, rye	32.5	9.78	32.8	1,755	14.7	220.2
Bread, other	5.0	1.52	5.1	570	4.8	105.4
Rolls and buns	18.9	5.69	19.1	3,573	30.0	62.9
Crackers	15.3	4.61	15.4	8,909	74.9	20.4
Cakes and cookies	15.5	4.68	15.7	6,160	51.8	30.0
Macaroni, spaghetti, and noodles	20.6	6.20	20.8	9,501	79.8	25.8
Rice	32.1	9.67	32.4	11,116	93.4	34.4
Pies	4.0	1.21	4.1	1,442	12.1	33.2
Tapioca and sago	1.5	.44	1.5	2,904	24.4	6.0
Sugar	146.0	43.97	147.3	11,848	99.6	146.6
Molasses, sirup, and honey	33.2	10.01	33.5	9,673	81.3	40.9
Candy	10.5	3.18	10.7	9,664	81.2	13.0
Chocolate	1.1	.34	1.1	3,179	26.7	4.3
Fruits, fresh:						
Apples—peck	16.8	5.08	17.0	11,692	98.3	17.1
Peaches—do	2.6	.79	2.6	7,315	61.5	4.2
Bananas—dozen	10.0	3.00	10.1	9,362	78.7	12.7
Lemons—do	4.2	1.25	4.2	9,682	81.4	5.1
Oranges—do	6.4	1.92	6.4	9,667	81.2	7.8
Grapes	16.1	4.85	16.2	7,691	64.6	24.9

QUANTITY OF SPECIFIED ARTICLES OF FOOD CONSUMED IN ONE YEAR BY WORKINGMEN'S FAMILIES—Concluded.

Article.	Average quantity of food consumed in one year per—			Family using.		
	Family.	Equivalent adult male.	Standard family.	Number of families using.	Per cent of families using.	Quantity.
Fruits, fresh—Concluded.						
Berries.....quart..	12.3	3.70	12.4	8,459	71.1	17.3
Canteloupe.....each..	5.7	1.72	5.8	3,960	33.3	17.1
Watermelon.....do....	1.9	.57	1.9	4,194	35.2	5.4
Other.....	32.8	9.87	33.1	7,224	60.7	54.0
Fruits, dried:						
Apples.....	1.1	.34	1.1	1,032	8.7	12.9
Prunes.....	10.2	3.08	10.3	7,808	65.6	15.6
Raisins.....	9.3	2.80	9.4	8,614	72.4	12.8
Peaches.....	1.8	.53	1.8	1,607	13.5	13.1
Other.....	1.6	.48	1.6	1,999	16.8	9.5
Fruits, canned:						
Peaches.....	4.0	1.22	4.1	3,032	25.5	15.9
Pineapple.....	2.2	.66	2.2	2,628	22.1	9.9
Other.....	1.9	.57	1.9	1,599	13.4	14.2
Jellies, preserves, marmalades, etc.....	5.4	1.62	5.4	3,734	31.4	17.1
Peanut butter.....	3.6	1.08	3.6	5,094	42.8	8.3
Vegetables, fresh:						
Potatoes, Irish.....	691.2	208.22	697.5	11,881	99.8	692.3
Potatoes, sweet and yams.....	51.3	15.46	51.8	7,371	61.9	82.8
Cabbage.....	62.3	18.77	62.9	10,517	88.4	70.5
Spinach and kale.....peck..	2.1	.63	2.1	4,416	37.1	5.6
Peas.....do....	1.6	.47	1.6	6,453	54.2	2.9
Beans, string.....do....	4.9	1.46	4.9	9,909	83.3	5.8
Tomatoes.....	99.1	29.85	100.0	11,286	94.8	104.5
Onions.....	65.0	19.57	65.6	11,489	96.5	67.3
Corn.....dozen..	7.8	2.34	7.8	9,571	80.4	9.7
Lettuce.....head..	28.0	8.44	28.3	9,330	78.4	35.7
Celery.....bunch..	8.3	2.49	8.3	7,407	62.2	13.3
Beets.....	18.8	5.66	19.0	7,401	62.2	30.2
Carrots.....	27.7	8.34	27.9	6,603	55.5	49.9
Turnips.....	19.4	5.84	19.6	5,734	48.2	40.3
Sauerkraut.....	2.0	.61	2.0	2,103	17.7	11.4
Asparagus.....bunch..	1.5	.45	1.5	2,000	16.8	8.9
Other.....	26.8	8.08	27.1	7,804	65.6	40.9
Vegetables, dried:						
Beans.....	23.0	6.93	23.2	8,843	74.3	31.0
Peas.....	3.3	.99	3.3	2,092	17.6	18.7
Other.....	10.5	3.16	10.6	4,623	38.8	27.0
Vegetables, canned:						
Beans, baked.....	6.3	1.90	6.4	4,294	36.1	17.5
Peas.....	9.7	2.92	9.8	6,548	55.0	17.6
Corn.....	10.2	3.07	10.3	6,921	58.2	17.5
Tomatoes.....	34.0	10.24	34.3	5,968	50.2	67.8
Asparagus.....	.3	.09	.3	435	3.7	8.3
Other.....	2.3	.70	2.3	1,713	14.4	16.2
Gelatin.....	1.1	.34	1.1	4,249	35.7	3.2
Canned soup.....	4.8	1.45	4.9	3,303	27.8	17.3
Tea.....	6.6	1.99	6.7	9,271	77.9	8.5
Coffee.....	38.9	11.72	39.3	11,263	94.6	41.1
Coffee substitute.....	.7	.22	.7	523	4.4	16.6
Cocoa.....	4.6	1.37	4.6	7,988	67.1	6.8
Nuts.....	4.2	1.27	4.3	8,667	72.8	5.8
Other foods.....	1.2	.35	1.2	1,021	8.6	13.7
Lunches.....number..	57.2	17.25	57.8	3,924	33.0	173.6

INDEX NUMBERS OF WHOLESALE PRICES OF BUILDING MATERIALS.

Revised Index Numbers of Wholesale Prices of Building Materials, 1913 to March, 1922.

THE United States Department of Labor, through the Bureau of Labor Statistics, announces that a revision has been made of its series of index numbers showing changes in the general level of wholesale prices of building materials. The index numbers hitherto published by the bureau have been influenced to a large extent by lumber prices in the New York market. These were practically the only prices available to the bureau at the inception of its series of weighted index numbers in 1913. It has recently become possible, however, to substitute lumber prices in other and more representative localities for those previously obtained in the New York market. In all such cases the new prices have been carried back to 1913.

In addition to the changes with respect to lumber, structural steel and a number of other important building materials not previously included in the index have been introduced into the revised index number and carried back to 1913. A comparison of the articles in the old and new index numbers is as follows:

Old series.—Brick, Chicago; brick, Cincinnati; brick, New York; Portland cement, mill; plate glass (2 series), New York; window glass (2 series), works; spruce lath, New York; lime, plant; Douglas fir (2 series), mills; hemlock, New York; maple, New York; plain white oak, New York; quartered oak, New York; white pine, New York; yellow pine flooring, New York; North Carolina pine, Norfolk; poplar, New York; spruce, New York; white lead, New York; linseed oil, New York; turpentine, New York; zinc oxide, New York; putty, New York; rosin, New York; cypress shingles, mills; and red cedar shingles, mills—total, 29 price series.

New series.—(*a*) Lumber: Douglas fir (2 series), mills; gum, St. Louis; hemlock, Chicago; maple, Chicago; plain white oak, Cincinnati; white pine, Buffalo; southern yellow pine flooring, mills; southern yellow pine timbers, mills; poplar, Cincinnati; spruce, Boston; yellow pine lath, mills; cypress shingles, mills; red cedar shingles, mills; (*b*) brick, average of 82-yard prices; (*c*) structural steel, Pittsburgh; (*d*) Portland cement, average of 6 plant prices; crushed stone, New York; gravel, average of 22 plant prices; hollow tile, Chicago; lime, average of 15 plant prices; sand, average of 26 plant prices; slate, quarry; plate glass (2 series), New York; window glass (2 series), works; linseed oil, New York; putty, New York; rosin, New York; turpentine, New York; white lead, New York; zinc oxide, New York; cast-iron pipe, New York; sheet copper, New York; copper wire, mill; lead pipe, New York; wire nails, Pittsburgh; reinforcing bars, Pittsburgh; roofing tin, Pittsburgh; and sheet zinc, mill—total, 41 price series.

Besides the substitution of lumber prices in other localities in place of the New York City prices and the inclusion of a number of new articles in the revised index, the figures have been further revised by the use of the more recent 1919 census data for weighting purposes instead of the 1909 data formerly employed. In the case of lumber, particularly, the use of the more recent information has appreciably affected the index numbers, since the cut of most kinds of lumber was much smaller in 1919 than in 1909. The revised index numbers for all years since 1913 are shown in the table which follows:

INDEX NUMBERS OF WHOLESALE PRICES OF BUILDING MATERIALS, 1913, TO MARCH, 1922.

[1913=100.]

Year and month.	(a) Lumber.	(b) Brick, common.	(c) Structural steel.	(d) Other building materials.	(e) All building materials.
1913	**100**	**100**	**100**	**100**	**100**
January	102	101	101	100	101
February	103	101	99	101	102
March	103	101	113	100	103
April	104	100	113	100	103
May	103	100	111	101	103
June	103	100	99	100	102
July	99	100	99	99	99
August	98	100	99	99	99
September	98	100	96	101	99
October	96	99	96	101	98
November	96	99	88	100	97
December	95	99	86	98	96
1914	**92**	**99**	**78**	**95**	**92**
January	94	99	73	96	93
February	94	99	79	96	94
March	94	99	81	97	94
April	93	99	76	97	93
May	93	99	76	96	93
June	93	99	76	95	93
July	92	99	76	95	92
August	92	99	81	96	93
September	92	99	81	95	92
October	88	99	81	94	90
November	87	99	78	91	88
December	87	99	74	91	88
1915	**89**	**99**	**85**	**102**	**94**
January	87	98	73	91	88
February	87	98	76	94	89
March	88	98	76	95	90
April	88	96	76	97	90
May	87	96	79	103	93
June	87	96	79	105	93
July	87	101	83	106	94
August	87	101	83	104	93
September	88	101	93	101	94
October	94	102	93	104	98
November	95	102	99	109	101
December	97	102	106	114	104
1916	**102**	**108**	**167**	**137**	**120**
January	101	101	119	121	110
February	102	101	129	128	113
March	103	101	157	133	118
April	102	105	174	135	120
May	101	105	174	138	121
June	100	105	174	139	120
July	99	117	174	137	120
August	100	117	174	137	120
September	100	117	177	138	121
October	104	125	177	142	124
November	106	125	179	145	126
December	108	125	199	154	132
1917	**135**	**132**	**247**	**172**	**157**
January	113	125	215	157	138
February	116	125	215	160	140
March	120	125	218	163	144
April	133	129	248	168	155
May	139	129	252	171	159
June	143	129	331	174	169
July	143	134	298	179	168
August	142	134	298	176	167
September	144	134	298	175	167
October	138	139	199	172	156
November	140	139	199	170	156
December	144	139	199	170	158
1918	**155**	**176**	**199**	**189**	**172**
January	148	149	199	172	161
February	148	149	199	174	161
March	149	149	199	179	164
April	157	173	199	180	169
May	157	173	199	184	170
June	157	173	199	189	172
July	161	187	199	195	177
August	160	187	199	200	179
September	160	187	199	202	179
October	156	194	199	200	177
November	156	194	199	202	177
December	157	194	199	199	177

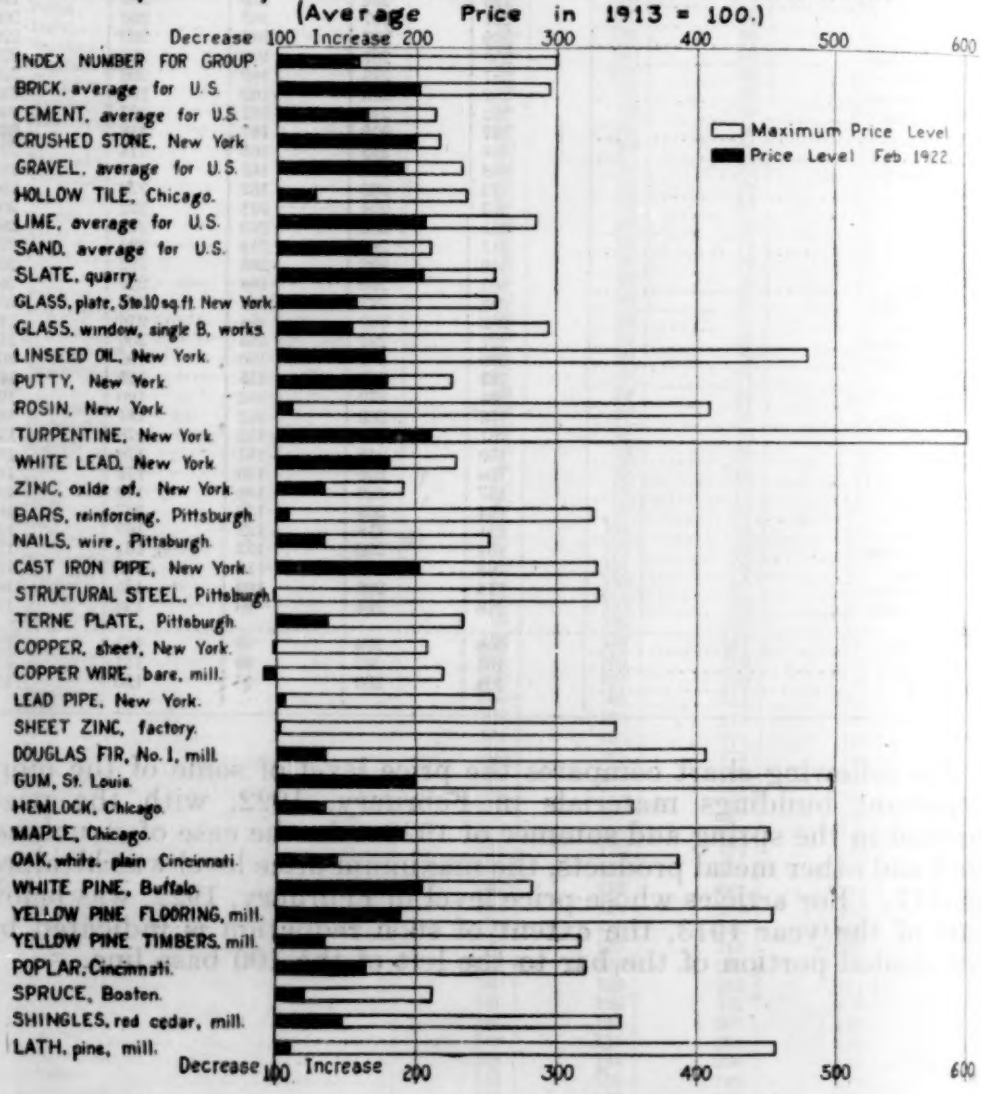
INDEX NUMBERS OF WHOLESALE PRICES OF BUILDING MATERIALS, 1913, TO MARCH, 1922—Concluded.

Year and month.	(a) Lumber.	(b) Brick, common.	(c) Structural steel.	(d) Other building materials.	(e) All building materials.
1919	**210**	**206**	**167**	**195**	**201**
January	159	202	199	194	176
February	158	202	185	189	173
March	158	202	185	184	171
April	160	204	162	179	169
May	169	204	149	181	173
June	195	204	149	189	189
July	221	207	162	200	209
August	249	207	162	209	226
September	256	207	162	207	229
October	257	213	162	206	229
November	262	213	162	206	232
December	292	213	162	207	248
1920	**307**	**279**	**187**	**218**	**264**
January	334	245	162	214	274
February	368	254	162	218	293
March	373	263	162	222	297
April	365	274	213	227	300
May	351	283	213	228	293
June	317	288	213	226	275
July	310	292	205	222	269
August	305	295	184	224	265
September	288	293	184	222	255
October	262	290	184	216	240
November	221	287	184	206	215
December	209	283	180	196	204
1921	**163**	**232**	**135**	**169**	**165**
January	194	272	162	190	192
February	176	269	162	181	180
March	167	261	152	178	173
April	159	248	147	176	167
May	158	236	146	172	165
June	157	230	146	170	163
July	154	223	139	167	160
August	151	218	122	163	156
September	154	209	122	161	156
October	163	207	116	159	159
November	174	206	109	155	163
December	168	204	99	153	158
1922					
January	166	204	99	153	157
February	165	202	99	151	156
March	164	200	96	150	155

The following chart compares the price level of some of the more important buildings materials in February, 1922, with the peak reached in the spring and summer of 1920. In the case of structural steel and other metal products, the maximum price level was attained in 1917. For articles whose price level in February, 1922, was below that of the year 1913, the extent of such reduction is indicated by the shaded portion of the bar to the left of the 100 base line.

WHOLESALE PRICES OF BUILDING MATERIALS.

Compiled by U.S. Bureau of Labor Statistics



Methods of Determining the Cost of Living.[1]

THE cost of living is determined on a nation-wide basis by several public and private agencies, and for the locality or localities in which their plants are located by many industrial establishments. The index numbers or figures so secured are of value when considering wage adjustments, for it is recognized that the cost of living and wage curves show the same general trend over long periods of time.

Methods for determining the cost of living are given herein drawn from four sources: Two manufacturing firms, the American Rolling Mills Co. and the Holt Manufacturing Co.;[2] an employers' organization, the National Industrial Conference Board; and a governmental agency, the United States Bureau of Labor Statistics. The first makes use of five cost factors, the second, four, the third, five, and the fourth, six. These together with their relative weights in determining the cost of living are given in Table 1.

TABLE 1.—RELATIVE WEIGHT OF FACTORS IN COST OF LIVING.

Item.	American Rolling Mills Co.	Holt Manufacturing Co.	National Industrial Conference Board.	U. S. Bureau of Labor Statistics.
1. Food	40	50.98	43.1	38.2
2. Clothing	17	29.95	13.2	16.6
3. Shelter	17.5	11.83	17.7	13.4
4. Fuel and light	5.5	7.25	5.6	5.3
5. Furniture and furnishings	.....	.....	.....	5.1
6. Miscellaneous	.....	.....	.....	21.3
7. Sundries	20	.....	20.4	.....
Total	100	100	100	100

There is substantial agreement between the first, third, and fourth in the order given above. The factors from the Holt Manufacturing Co. are substantially higher for food and clothing.

The American Rolling Mills Co. takes an average family as including a father, mother, a boy of 11, a girl of 5, and a boy of 2. The consuming power of this family is equivalent to 3.2 adult males. The Holt Manufacturing Co. considers a family as consisting of a father, mother, a boy of 15, a boy of 9, and a girl of 7. The consuming power of such a family is taken as equal to 3.6 adult males.

The articles and items comprising each of the major factors together with weighting are given below.

1. Food.

THE items and quantities forming the food budget of American Rolling Mills Co. are given in Table 2. There are 35 staple articles in this table, some of which are grouped under general headings and later expanded into several items in determining costs.

[1] This article is reprinted from Management Engineering for April, 1922, pp. 257-260.
[2] Bulletin of the Taylor Society, October, 1919.

TABLE 2.—FOOD.[3]
(American Rolling Mills Co.).

Article.	Quantity.	Article.	Quantity.
Eggs	1. 45 doz.	Coffee	0. 6 lb.
Milk	13. 46 qts.	Tea	0. 25 lb.
Lard and compound	0. 9 lb.	Bread	10. 06 lbs.
Butter and oleo	1. 92 lbs.	Flour	5 lbs.
Cheese	0. 95 lb.	Macaroni	1 lb.
Potatoes	1. 11 pks.	Pork chops	2 lbs.
Vegetables (fresh and dried)	8. 20 lbs.	Steaks (sirloin)	2 lbs.
Fruit (fresh)	8 lbs.	Steaks (round)	3 lbs.
Fruit (dried)	1. 8 lbs.	Ham (whole)	2 lbs.
Cereals	5. 82 lbs.	Bacon (whole)	1 lb.
Sugar	2. 81 lbs.	Vegetables (can)	1 can.
Molasses	1 pt.		

[3] Weekly basis. [Ed.]

When the price of a food article becomes abnormally high, less expensive articles are frequently purchased instead of the ones ordinarily used.

Lard and compounds: For the years 1913, 1914, 1915, and 1916, all lard and no compounds. For 1917 and 1918, two thirds lard to one-third of compound. For 1920, one-half of each.

Vegetables, fresh and dried: Four pounds of beans, two pounds of dried onions, and 2.2 pounds of fresh cabbage. One dozen bananas, one-half dozen cabbages, and a small measure of apples are equivalent to 8 pounds of fresh fruit.

Dried fruit: One pound of prunes, 0.4 pound of apricots, and 0.4 pound of raisins.

Cereals: 1½ boxes oats, 1 box corn flakes, and 3.3 pounds of rice. For 1920, 2 boxes of rolled oats, 1 box corn flakes and 2.8 pounds rice.

Vegetables, canned: Corn, peas, and tomatoes, one-third of each.

Butter and oleo: For 1913, 1914, 1915, and 1916, 1 pound of butter was used and no oleo. For 1917 and 1918, one-half pound of each. For 1919 and 1920, two-thirds oleo to one-third of butter.

The Holt Manufacturing Co. has prepared four typical menus for the winter, spring, summer, and fall months. These are given in Table 3.

TABLE 3.—FOOD.[4]
(Holt Manufacturing Co.)

Article.	Unit.	Winter.	Spring.	Summer.	Fall.
Sugar	Pound	1	1	1	1
Butter	do	½	½	½	½
Coffee	do	⅛	⅛	⅛	⅛
Flour for bread, cake, pancakes, etc	do	1	1	1	1
Milk	Quart	2	2	2	2
Oatmeal	Pound	½			½
Navy beans	do	1½			1½
Potatoes	Quart	1½	1½	1½	1½
Onions	do	1		2	
Pot roast	Pound	1			2
Round steak	do	1½		1½	1½
Bacon	do	¼			
Lard	Ounce	4	6	6	6
Apples	Peck	½			
Eggs	Dozen	½	⅝	⅝	⅝
Stew beef	Pound		3		
Corn	Can		2		
Ham	Pound		1½		
Peas	Can		2		
Bananas	Pound		2		
Cabbage	do			1½	
Pork chops	do			1½	
Rice	do			½	

[4] Daily menu basis. [Ed.]

2. Clothing

In determining the items which entered these menus, the company prepared and sent to its employees a questionnaire to secure information which would show the essential items of living cost in the locality of the plant. Two hundred and eighty were sent out, an equal proportion to each of three classes of employees divided as follows—unskilled, skilled, and highly skilled. All the articles of food appearing in these questionnaires for each meal during the four seasons were listed and the number of times each appeared was noted. Articles appearing in any certain meal in as much as 50 per cent of the cases were included in the average typical menu. However, articles appearing in less than 50 per cent of the cases were divided and one article was included in that meal for one season and the other article included in the same meal for the next season.

TABLE 4.—FOOD.[5]

(U. S. Bureau of Labor Statistics.)[5]

Article.	Quantity.	Article.	Quantity.
Sirloin steak.....pounds..	32	Corn meal.....pounds..	54
Round steak.....do....	32	Rolled oats.....do....	41
Rib roast.....do....	31	Corn flakes.....do....	7
Chuck roast.....do....	31	Cream of wheat.....do....	7
Plate beef.....do....	23	Macaroni.....do....	23
Pork chops.....do....	36	Rice.....do....	35
Bacon.....do....	17	Beans (navy).....do....	22
Ham.....do....	22	Potatoes.....do....	704
Lamb.....do....	8	Onions.....do....	66
Hens.....do....	23	Cabbage.....do....	65
Salmon (canned).....do....	9	Beans (baked).....do....	7
Milk (fresh).....quarts..	337	Corn (canned).....do....	10
Milk (evaporated).....pounds..	77	Peas (canned).....do....	10
Butter.....do....	66	Tomatoes (canned).....do....	16
Oleomargine.....do....	16	Sugar.....do....	147
Nut margarine.....do....	6	Tea.....do....	8
Cheese.....do....	12	Coffee.....do....	40
Lard.....do....	34	Prunes.....do....	11
Crisco.....do....	9	Raisins.....do....	6
Eggs, strictly fresh.....dozen...	61	Bananas.....dozen..	11
Bread.....pounds..	531	Oranges.....do....	7
Flour.....do....	264		

[5] See MONTHLY LABOR REVIEW, March, 1921, p. 26. [Ed.]

The National Industrial Conference Board does not gather statistics in regard to food, but makes use of the factors and index numbers of the United States Bureau of Labor Statistics.

Up to 1921 the United States Bureau of Labor Statistics based its figures for the cost of food upon 22 articles. At that time a change was made, the "family market basket" being enlarged to contain 43 articles. The average prices for each of these articles is reported to the bureau by individual merchants in 51 cities. The average price per unit of each commodity is multiplied by the units of that commodity consumed by the family. (See Table 4.)

The products of these multiplications represent the cost to the average family of each of these 43 articles. These products are added and the sum is taken as the actual money cost of food to the average family. The quantities consumed by the average family was ascertained by the Bureau of Labor Statistics in an investigation conducted in 1918. Nearly 9,000 families were visited in the 51 cities from which monthly prices are now secured.

2. Clothing.

THE items of clothing for the five members of the average family used as a basis by the American Rolling Mills Co. are given in Table 5, together with the quantity weighting for each garment. In determining price only standard brands of good quality are selected. Information is secured from the records of local dealers, and in some cases additional data from the factories in regard to standard stock numbers.

TABLE 5.—CLOTHING.

(American Rolling Mills Co.)

Item.	Quantity weighting.	Item.	Quantity weighting.	Item.	Quantity weighting.
Husband:		**Wife—Concluded.**		**Girl—5 years:**	
Hat (felt)	½	Dress (serge)	½	Hat (summer)	1
Hat (straw)	1	Coat (wool)	½	Cap (tam)	1
Overcoat	¼	Gloves (kid)	½	Dress (cotton)	4
Suit	1	Dresses (house)	2	Dress (wool)	½
Heavy trousers	1	Apron (bungalow)	2	Apron	1
Overalls	2	Corset	1	Coat	½
Work shirts	3	Night dresses	2	Sweater	½
Dress shirts	2	Stockings (cotton)	6	Petticoats	3
Collars	6	Stockings (silk)	2	Underwear	2
Ties	2	Shoe repairs	2	Underwear (summer)	2
Suspenders	1	Handkerchiefs	8	Underwear (winter)	2
Belt	½	Umbrella	¼	Night dresses	2
Handkerchiefs	8	Rubbers	½	Stockings	6
Night shirts	2	Cleaning-pressing	1	Shoes	4
Summer underwear	2	**Boy—11 years:**		Rubbers	1
Winter underwear	1	Cap	1	Mittens	1
Socks (cotton)	8	Hat	½	Handkerchiefs	6
Shoes	2	Suit (wool)	1	Garters	2
Shoe repairs	2	Pants (wool)	1	Bloomers	2
Rubbers	½	Pants (cotton)	2	Shoe repairing	4
Gloves (work)	6	Overcoats	⅓	**Boy—2 years:**	
Garters	2	Overalls	1	Hat (duck)	1
Clean-pressing	1	Blouses (cotton)	4	Cap	1
Gloves (kid)	½	Underwear (summer)	2	Rompers	8
Wife:		Underwear (winter)	2	Overcoat	⅓
Hat (straw)	½	Night shirts	2	Sweater	⅓
Wash skirt	½	Stockings	12	Underwear (summer)	3
Waists	2	Shoes	3	Underwear (winter)	3
Dress waist	½	Shoe repairs	3	Night dresses	3
Dress (cotton)	1	Rubbers	1	Stockings	6
Summer underwear	2	Gloves or mittens	1	Shoes	3
Winter underwear	1	Collars	3	Mittens	1
Petticoats	2	Ties	3	Garters	2
Shoes	2	Handkerchiefs	6		
Hat (felt)	½	Belt	½		
Suit (wool)	½	Sweater	½		

TABLE 8.—CLOTHING—Concluded.

TABLE 6.—CLOTHING.

(Holt Manufacturing Co.)

Item.	Quantity weighting.	Item.	Quantity weighting.	Item.	Quantity weighting.
Man:		Woman—Concluded.		Boy—9 years:	
Suit	1.6	Underwear (light)	2.5	Suit	2
Shoes	3.2	Stockings	8.6	Overcoat (2 years)	1
Underwear (heavy wool)	2.3	Shirtwaists	3.6	Shoes	6
Underwear (light)	2.3	Handkerchiefs	1.5	Flannel waist	3
Handkerchiefs	12.6	Corsets	2	Sweater	1
Socks	13.3	Corset covers	5.4	Gingham waist	6
Shirts (dress)	2.7	Petticoats	5.8	Underwaist	2
Shirts (work)	4	Gloves	2.4	Hats	2
Hats (soft)	1	Aprons	5.4	Rubbers	3
Hats (straw)	1	Coats (3 years)	1	Stockings	12
Overcoats (3 years)	1	Night gowns	5	Underwear (heavy)	2
Overalls	4	Boy—15 years:		Night shirts	2
Caps	1.5	Suit (long pants)	1	Girl—7 years:	
Neckties	8	Overcoat (2 years)	1	Coat	2
Collars	9.9	Shoes	3	Hats	2
Gloves	1.8	Stockings	12	Stockings	12
Work pants	1.8	White shirts	2	Shoes	4
Night shirts	2	Flannel shirts	3	Rubbers	3
Rubbers	1	Pajamas	2	Pants	6
Woman:		Linen collars	8	Skirt	8
Suit	1.6	Neckties	10	Dresses	8
House dress	3.8	Sweater	1	Underwear	4
Hats	2	Underwear	2	Hair ribbon (per yard)	6
Shoes	3	Hats	2	Underwaists	2
Underwear (heavy)	2.5	Cap	1		

TABLE 7.—CLOTHING.

(National Industrial Conference Board.)

Man:	Woman:
Suit.	Coat or suit.
Overcoat.	Woolen.
Heavy trousers.	Woolen skirt.
Two shirts.	Two cotton skirts.
Three work shirts.	Four waists.
Three overalls.	Two housedresses.
Shoes and repairs.	Three aprons.
Eight pairs of hose.	Shoes, overshoes, and repairs.
Five sets underwear.	Hosiery.
Two nightshirts.	Corsets.
Collars and ties.	Six union suits.
Hats, caps, and gloves.	Muslin underwear.
Sundries.	Three petticoats.
	Three nightgowns.
	Hats.
	Gloves.
	Sundries.

TABLE 8.—CLOTHING.[6]

(U. S. Bureau of Labor Statistics.)

Item.	All-year weighting.	Summer weighting.	Winter weighting.
Man:			
Hats (straw)		1	
Hats (felt)	1		
Caps	1		
Suits		½	½
Overcoats			½
Overalls or work trousers	2		
Shirts (cotton)	6		

[6] This list, not shown hitherto in any of the bureau's publications, is given as a representative list of articles upon which price changes are based, but is not intended as a complete budget of family needs in this group.—[Ed.]

TABLE 8.—CLOTHING—Concluded.

Item.	All-year weighting.	Summer weighting.	Winter weighting.
Man—Continued.			
Union suits	2	3	2
Nightshirts	12		
Socks (cotton)	2½		
Shoes (high)	½		
Rubbers	6		
Collars	2		
Neckties	1		
Whole soles and heels (sewed)	1		
Half soles and heels (sewed)			
Woman:			
Coats (wool)			1
Suits (wool)			1
Skirts (cotton, wash)		½	
Waists (silk)		½	
Waists (voile) (3), yards	6		
Dresses (wool)			1
Dresses (voile, organdie, gingham) (2), yards	10		
House dresses	2		
Apron (gingham) (1), yards	2		
Kimonos	½		
Petticoats (muslin)		1	
Petticoats (not silk)			1
Nightgowns (muslin)	2		
Union suits		2	1
Combinations (muslin)	2		
Corset-covers	2		
Brassières	2		
Corsets	2		
Stockings (cotton)	8		
Shoes (low)		1	
Shoes (high)			1
Rubbers	1		
Half soles and heels (sewed)	1		
Rubber heels	3		
Boy—12 years:			
Caps	2		
Trousers (cotton)		2	
Trousers (wool)			1
Overcoats or mackinaws			½
Suits (wool)	1		
Shirts (cotton)	5		
Nightshirts	2		
Union suits		3	2
Stockings (cotton)	12		
Shoes (high)	5		
Neckties	2		
Half soles and heels (sewed)	5		
Girl—6 years:			
Coats (wool)			½
Dresses (gingham) (6), yards	18		
Dress (serge) (½), yards	¾		
Apron (gingham) (1), yards	2½		
Petticoats			1
Petticoats (muslin)		2	
Nightgowns			1
Nightgowns (muslin)		1	
Union suits			2
Drawers (muslin)		5	
Underwaists	5		
Stockings (cotton)	12		
Shoes (low)		2	
Shoes (high)			3
Rubbers	1		

By means of a questionnaire the Holt Manufacturing Co. determined the articles of clothing and quantities used by that firm's average family for the years 1916, 1917, and 1918. These data are given in Table 6. For each of the five members of the family are given the articles and quantities used annually.

Table 7 gives the items of a trial clothing budget prepared by the National Industrial Conference Board. It is intended to show the quantity of clothing bought during the year, not all the clothing used.

This organization assumes that children's clothing tends to change in cost in about the same proportion as that of adults. The articles listed are considered the most important in normal clothing requirements. Variations from this list do not appreciably affect the percentages of cost change. It should be noted that this table is used for ready-to-wear clothing.

The United States Bureau of Labor Statistics uses 70 articles of clothing for a family consisting of father, mother, a boy of 12, and a girl of 6, as shown in Table 8. These are arranged with three weightings, "all year, summer, and winter." Prices are secured by special agents of the bureau, who make arrangements with the dealers and gather information directly from them.

3. Shelter.

IN DETERMINING the cost of shelter the American Rolling Mills Co. divided the 2,200 houses in the town of Middletown, Ohio, into three classes in accordance with a house survey made by the Independence Bureau in 1919. That report gave the ratio for houses of various classes as shown in Table 9.

TABLE 9.—SHELTER.

(American Rolling Mills Co.)

Type of house.	No. of rooms.	Prop. No. of houses.	Type of house.	No. of rooms.	Prop. No. of houses.
Plain	3	9	Semimodern	5	5
Do	4	15	Modern	4	1
Do	5	19	Do	5	5
Do	6	6	Do	6	6

From rental agencies are secured rental figures which multiplied by the relative proportion of houses give the item for cost of shelter.

From the questionnaire of the Holt Manufacturing Co. it is found that an equal percentage of employees owned their homes in the north and south ends, respectively. About double that number owned homes on the bluffs and 18 per cent in East Peoria. In compiling figures on cost of ownership, 17 houses were selected, distributed according to these percentage figures. The total taxes, 2 per cent depreciation and total insurance for each year were included, and these figures were reduced to a daily cost by dividing the annual cost by 300, always considering that a man must earn enough in 300 working days to care for himself and his family during a year of 365 days. The average rentals were taken from the data given in the questionnaire. These were reduced to a daily rental cost which was used as the daily cost of shelter.

The estimates in regard to shelter of the National Industrial Conference Board are based on a schedule of rents in all cities in the United States having a population of 50,000 or over in 1920 and in a few smaller places. Information is drawn from 164 cities.

The United States Bureau of Labor Statistics secures quarterly information in regard to rents on some 250 to 850 houses and apartments in each of the 51 cities where data are gathered.

4. Fuel and Light.

THE annual unit figures for coal, gas, and electricity for an average family as determined by the American Rolling Mills Co. are given in Table 10:

TABLE 10.—FUEL AND LIGHT.

(American Rolling Mills Co.)

Pocahontas coal	8 tons per year.
Gas	84,000 cubic feet per year.
Electricity	200 kw. hours per year.

Similar quantities as determined by the Holt Manufacturing Co. are given in Table 11.

TABLE 11.—FUEL AND LIGHT.

(Holt Manufacturing Co.)

Coal (Peoria or Springfield district bituminous)	17.6 tons per year.
Gas (for cooking)	33 M cubic feet per year.
Electricity (for lighting)	299 kw. hours per year.

In determining changes in the cost of fuel and light the National Industrial Conference Board assumes that about two-thirds of the average families' expenditure for these items is for coal and about one-third for light.

The Bureau of Labor Statistics secures the prices for coal, wood, gas, and electricity in the same manner used for obtaining information on prices of articles of food. From these it compiles the cost of fuel and light factors.

5. Furniture and Furnishings.

A FACTOR covering furniture and furnishings is included by the Bureau of Labor Statistics, but not by any one of the other agencies. In all, 30 articles are studied, as shown in Table 12, which gives the items and the weighted quantity for each.

TABLE 12.—FURNITURE AND FURNISHINGS.[6]

(U. S. Bureau of Labor Statistics.)

Carpets, rugs (wool)	yards	3.9	Baby carriages	each	0.2
Matting rugs (grass)	square yards	0.5	Pillow cases	do	1.9
Linoleum	do	1.8	Sheets	do	1.3
Chairs (living-room and dining-room)	each	0.8	Tablecloths	do	0.3
Tables (library, dining, kitchen)	do	0.2	Towels	do	2.8
Couches (sanitary or bed)	do	0.1	Blankets (cotton and wool)	do	0.5
Dressers and chiffoniers	do	0.1	Comforts	do	0.2
Buffets	do	0.1	Cook stoves and heating stoves	do	0.3
Bedsteads	do	0.2	Brooms	do	3.0
Bedsprings	do	0.2	Sewing machines	do	0.1
Mattresses	do	0.3	Refrigerators	do	0.1

[6] This list, not shown hitherto in any of the bureau's publications, is given as a representative list of articles upon which price changes are based, but is not intended as a complete budget of family needs in this group. [Ed.]

6. Miscellaneous.

THE Bureau of Labor Statistics also makes use of a factor composed of "miscellaneous items." These are given in Table 13, together with weighted quantities.

TABLE 13.—MISCELLANEOUS ITEMS.[6]

(U. S. Bureau of Labor Statistics.)

Street car:	
Regular fare, adult	550
Movies:	
First floor, week night, adult	70
Newspaper:	
Daily on street	313
Sunday on street	52
Doctor:	
Office visit, usual charge	7
House visit, usual charge	7
Obstetrical case, usual charge	0.1
Medicine:	
Calomel tablets, ½ grain, dozen	4
Aspirin tablets, 5 grain, do	4
Castor oil, ounces	8
Quinine pills, dozen	4
Standard prescription, liquid, 2 ounces, prescriptions	3
Standard prescription, liquid, 4 ounces, prescriptions	3
Standard prescription, capsule or pill, 3-grain mixture, 1 dozen, prescriptions	8
Hospital:	
Pay ward, week	0.2
Dentist:	
Filling, usual charge	4
Crown, usual charge	0.5
Plate, full upper, usual charge	0.05
Spectacles:	
Gold-filled rims, flat spherical lens	0.3
Single separate lens	0.5
Laundry:	
Men's stiff collars	104
Men's shirts, soft cuffs attached	52
Sheets	104
Turkish towels	104
Flat work, pounds	208
Cleaning supplies:	
Soap, small, cakes	30
Laundry soap (6 to 12 ounces), do	60
Soap powder (8 to 16 ounces), packages	12
Cleaning powder (14 to 18 ounces), do	24
Barber:	
Shave	25
Hair cut	10
Toilet articles and preparations:	
Toothbrush	3
Toilet soap, cakes	30
Shaving stick or cream, sticks or tubes	2
Tooth powder or paste, cans or tubes	6
Talcum powder, cans	8
Vaseline (1 to 2 ounces), jar	1
Telephone:	
Residence	0.5
Tobacco:	
Cigars	110
Cigarettes, packages	60
Cigarette tobacco (1 to 2 ounces), do	30
Pipe tobacco (1 to 2 ounces), do	20
Plug tobacco (1 to 3½ ounces), cuts	20

[6] This list, not shown hitherto in any of the bureau's publications, is given as a representative list of articles upon which price changes are based, but is not intended as a complete budget of family needs in this group. [Ed.]

7. Sundries.

A FACTOR for sundries is used both by the American Rolling Mills Co. and the National Industrial Conference Board. Table 14 gives the items and annual quantities as determined by the former.

TABLE 14.—SUNDRIES.

(American Rolling Mills Co.)

Barber's services:	
Hair-cut (husband)	12
Hair-cut (children)	8
Bus fare:	
Husband to work	600
Wife and children	150
Toilet soap (bars)	90
Shoe-polish (boxes)	6
Tobacco (cans, smoking)	150
Newspapers—(one daily and one Sunday)	364
Candy (pounds)	25
Movies (3 persons once each week—50 weeks)	150
Doctor calls	10
Teeth filled	6
Church	
Incidentals	

The latter considers such items as car fares, doctor's fees, church contributions, organization dues, insurance, medicines, reading material, amusements, furniture, furnishings, household supplies, candy, soft drinks, and tobacco. The weighted quantities are not available.

Retail Prices and Purchasing Power of Money in Australia.

THE December, 1921, Quarterly Summary of Australian Statistics contains figures showing changes in retail prices of food and rent and in the purchasing power of money from 1901 to the end of 1921. These figures are computed on the basis of 1911. To make them comparable with cost-of-living figures published by the United States Bureau of Labor Statistics, in the tables given below they have been recomputed with 1913 instead of 1911 as the base:

INDEX NUMBERS OF RETAIL PRICES OF FOOD, IN CAPITAL CITIES OF AUSTRALIA, AT SPECIFIED PERIODS.

[Weighted average of cities for 1913=100.]

City.	1913.[1]	July, 1914.	December—		
			1919	1920	1921
Sydney	103	105	174	198	152
Melbourne	94	101	158	196	149
Brisbane	95	97	180	180	152
Adelaide	102	114	166	197	150
Perth and Fremantle	[2] 116	122	157	184	161
Hobart	106	111	177	205	163

[1] Figures for 1913 are recomputed from data given in Australian Bureau of Census and Statistics Labor Bulletin No. 7 (July-Sept., 1914), pp. 176 and 177, on basis of weighted average for these cities as there given.
[2] Perth only.

It is seen from the above table that retail prices of food which had in December, 1920, risen in all the cities to nearly double what they were in 1913 had by December of the following year fallen so that they were only about half again as high as in 1913.

In the first half of the table below are given the average amounts necessary in the six cities in each specified year to purchase what in 1911 would have cost 20 shillings ($4.87, par). In the second half of the table the figures have been recomputed using 1913, instead of 1911, as the basis of comparison. Thus the second half of the table shows the amount necessary in each year purchase to what would have cost 20 shillings in 1913.

AMOUNT NECESSARY TO PURCHASE WHAT WOULD HAVE COST 20 SHILLINGS IN 1911 AND IN 1913, IN 6 AUSTRALIAN CAPITALS, 1911 TO 1920.

[Shilling at par=24.3 cents; penny=2.03 cents.]

Year.	Weighted average for 6 capital towns.			
	On basis of 1911.		On basis of 1913.	
	Food.	Rent.	Food.	Rent.
	s. d.	s. d.	s. d.	s. d.
1911	20 0	20 0	.....	.....
1912	22 6	21 3	.....	.....
1913	21 11	22 4	20 0	20 0
1914	22 11	22 8	20 11	20 4
1915	28 4	21 7	25 11	19 4
1916	29 11	21 7	27 4	19 4
1917	29 5	22 0	26 10	19 8
1918	30 3	22 10	27 7	20 5
1919	34 4	24 4	31 4	21 9
1920	42 0	26 8	38 4	23 11
1921	38 0	28 1	34 7	25 2

The table above shows that an amount of food which in 1913 cost 20 shillings ($4.87, par) required 38s. 4d. ($9.33, par) for its purchase in 1920. By the end of 1921, however, prices had fallen somewhat and the same amount cost only 34s. 7d. ($8.42, par).

Retail Prices of Food and Fuel in Canada, February, 1922.

THE March, 1922, issue of the Labor Gazette, published by the Department of Labor of Canada, gives retail prices of numerous articles of food, of fuel, and of lighting, by localities, and also average prices for the Dominion. The following table shows average prices of a selected list of commodities for the Dominion at the beginning of February, 1922.

RETAIL PRICES OF FOOD AND FUEL IN CANADA, FEBRUARY, 1922.

Commodity.	Unit.	Price.	Commodity.	Unit.	Price.
		Cents.			*Cents.*
Beef, sirloin steak	Pound	27.7	Corn meal	Pound	6.0
Beef, round steak	do	23.1	Rice, Japan	do	11.2
Beef, rib roast, prime	do	21.3	Tomatoes, canned, 2½'s	Can	19.1
Beef, shoulder roast	do	15.7	Peas, canned, standard, 2's	do	19.0
Veal, shoulder roast	do	18.8	Corn, canned, 2's	do	17.2
Mutton, leg	do	26.2	Beans, dry, common, white	Pound	8.5
Lamb, leg	do	30.4	Onions	do	9.8
Pork chops, loin	do	30.1	Potatoes	15 lbs	31.6
Bacon, sliced	do	43.8	Apples, evaporated	Pound	21.7
Salmon, canned, sockeye	do	51.4	Prunes, medium	do	18.5
Lard, pure leaf	do	20.8	Raisins, seeded	15 oz	28.0
Eggs, fresh, specials and extras	Dozen	56.2	Sugar, granulated, dollar lots	Pound	8.8
Milk, fresh	Quart	13.0	Tea, black, medium, packets	do	55.4
Butter, dairy, prints	Pound	39.4	Tea, green, medium, packets	do	58.2
Butter, creamery, prints	do	44.7	Coffee, medium, ground	do	54.0
Oleomargarine, best	do	29.1	Starch, laundry	do	12.5
Cheese, old	do	31.9	Coal, anthracite	Ton	1,744.4
Cheese, new	do	28.7	Coal, bituminous	do	1,127.5
Bread, plain, white	do	7.0	Wood, hard, stove lengths	Cord	1,472.3
Flour, family, 24-pound bag	do	4.7	Wood, soft, stove lengths	do	1,129.5
Oats, rolled	do	5.5	Coal oil	Gallon	31.7

Retail Prices of Food and Clothing in Paris, France, 1914 to 1921.

THE changes in the cost of food and other articles of necessity and in the retail prices of shoes and clothing in Paris are given in a recent consular report. The price changes for each year from 1914 to 1921 are shown in the tables following.

RETAIL PRICES OF FOOD AND FUEL IN PARIS, 1914 TO 1921.

[1 franc at par=19.3 cents; 1 kilogram=2.2 pounds; 1 liter=1.06 quarts.]

Commodity.	Unit.	1914	1915	1916	1917	1918	1919	1920	1921
		Francs.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
White bread	Kilogram	0.40	0.425	0.425	0.45	0.45	0.45	1.30	1.30
Wheat flour	do	.60	.60	.60	.70	.70	.70	1.75	1.75
Beef, second quality	do	1.70	2.30	2.00	3.20	3.60	5.60	9.30	9.05
Beef, first quality beefsteak	do	3.80	5.00	5.00	8.00	7.80	11.00	17.20	16.80
Veal, second quality	do	2.20	2.60	2.60	4.00	4.00	7.50	12.55	12.20
Veal, first quality	do	3.60	4.20	4.20	6.00	7.60	10.50	19.00	18.25
Mutton, second quality	do	1.80	2.40	4.40	4.00	4.80	7.00	9.15	9.00
Mutton, leg	do	3.20	4.00	3.80	5.20	8.00	10.00	15.85	15.10
Pork, first quality	do	4.00	4.20	4.60	6.40	8.40	10.40	14.05	12.00
Pork, ham	do	2.60	2.80	3.00	4.20	4.80	5.90	10.85	9.25
Pork, bacon	do	3.20	3.60	4.00	5.60	7.00	8.50	9.30	7.90
Pork, lard	do	3.00	3.40	3.60	6.00	8.00	8.00	11.80	10.05
Butter	do	3.80	4.80	4.80	8.00	9.20	11.20	18.55	18.20
Gruyère cheese	do	2.80	3.60	6.00	9.20	8.80	16.00	13.50	13.85
Eggs	Dozen	1.50	2.00	2.40	3.60	4.95	5.40	10.40	7.20
Milk	Liter	.25	.30	.40	.50	.60	.75	1.10	1.00
Potatoes	Kilogram	.25	.20	.30	.40	.60	.50	.65	.45
Rice	do	.90	.90	1.00	2.80	2.50	1.10	4.80	3.25
White beans	do	.85	1.00	1.20	1.80	.....	1.30	2.60	1.70
Lentils	do	.90	1.50	2.00	.....	2.60	2.60	2.30	3.25
Sugar	do	.75	1.25	1.30	1.70	2.05	2.10	3.45	3.00
Oil, ordinary	do	1.80	2.10	3.00	5.60	6.40	6.80	8.80	6.10
Wine, ordinary	Liter	.45	.35	.85	1.10	1.60	1.60	1.45	1.30
Beer	do	.20	.30	.30	.55	.95	.85	.90	.80
Cider	do	.25	.25	.35	.45	.....	.....	.85	.90
Mineral water	do	.75	.75	.80	.80	.90	.95	1.75	1.75
Petroleum	do	.70	.70	.70	.80	1.00	1.00	1.90	1.95
Methylated spirit	do	.55	1.35	3.00	4.05	4.85	2.50	3.60	3.40
Soap	Kilogram	.90	1.10	2.00	2.80	3.00	3.50	3.80	3.00

REATIL PRICES OF SHOES AND CLOTHING IN PARIS, 1914 TO 1921.

[1 franc at par=19.3 cents.]

Items.	1914	1915	1916	1917	1918	1919	1920	1921
	Francs.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
Men's complete suit (to order):								
Ordinary	70	95	120	190	250	320	500	375
Medium	160	180	240	300	400	500	800	600
De luxe	200	250	300	400	600	700	1,200	800
Men's overcoat (to order):								
Ordinary	80	95	120	190	250	320	500	380
Medium	150	180	240	300	400	500	800	550
De luxe	200	250	300	400	500	700	1,200	800
Men's complete suit (ready made)	40	65	80	110	160	190	240	200
Men's overcoat (ready made)	45	75	85	110	180	190	240	200
Ladies' tailored suit:								
Ordinary	250	250	250	300	400	500	700	600
Medium	400	400	400	450	500	600	800	700
De luxe	650	650	650	700	750	850	1,200	900
Ladies' ready made suit, ordinary	60	90	110	150	250	300	350	300
Men's hats:								
Felt	11.50	15.50	16	22	30	40	50	40
Straw	6	9	14	17	19	21	25	20
Men's shoes	20	22	38	58	79	90	100	85
Ladies' shoes	19	21	35	60	84	95	110	90
Children's shoes	14	16	25	35	50	55	65	55
Men's chemise	6	8	10	11	13	18	25	20
Men's nightdress	7	9	12	13	14	19	28	24
Ladies' chemise	5	7	9	9	12	16	21	18
Ladies' nightdress	8	10	13	16	19	27	35	28
Drawers	4	6	7	9	11	14	17	15
Lingerie	6	8	9	12	16	20	26	22
Collars (half dozen)	4	4	5	6	11	14	18	15
Cuffs	6	7	9	13	16	20	28	26
Tie	4	4	5	6	9	12	17	14
Socks (pair)	2	3	3	4	6	8	10	9
Men's gloves	4	6	8	8	13	15	22	18
Ladies' gloves	4	5	7	8	12	14	22	18
Umbrella	10	12	14	15	20	28	40	32

Cost of Living of the British Middle Class.

THE cost-of-living index published each month by the British Ministry of Labor represents the increased cost of maintaining an average standard of living in a working-class household over pre-war cost. To ascertain a corresponding index applicable to middle-class families, an investigation[1] has recently been made by a committee of experts representing several bodies of civil servants. Data from over 1,000 completed schedules for family budgets which were issued by the investigating committee to civil servants either in actual receipt of or on scales of salary rising to £500 ($2,433.25, par) per annum and upward, give results shown in the following table. The increased income tax was not taken into account in preparing these data.

INCREASE IN COST OF LIVING FOR MIDDLE-CLASS HOUSEHOLDS.

[1 pound at par=$4.8665.]

Range of present-day expenditures.	Percentage increase in cost of living over pre-war cost.	
	October, 1921.	January 31, 1922.
£750 to £1,000	106	96
£1,001 to £1,200	105	97
£1,201 to £1,500	106	98
£1,501 to £1,750	106	99
£1,751 to £2,000	106	100

The Labor Gazette (London) figures for the same dates were 110 and 88, respectively.

The committee reached the conclusion that while the increase in the cost of middle-class living corresponds much more nearly to that of the working classes than is generally believed, it is falling more slowly in the case of the middle classes. This is due to the smaller proportion in which food and clothing (two items whose fall in cost has been the most noticeable of the 123 items considered) enter into the total expenditure. Cost of living in a middle-class household is now approximately double the 1914 level.

[1] Manchester Guardian, Mar. 15, 1922, p. 7.

WAGES AND HOURS OF LABOR.

Average Union Rate of Wages per Hour in the United States, May 15, 1920 and 1921.

THE union wage investigation of the Bureau of Labor Statistics for 1921 covered 930,903 persons distributed through 95 trade classifications. The investigation covered 66 principal cities.

The accompanying table shows the average union rate of wages per hour for the time workers in each occupation for 1920 and 1921 as compiled from the material indicated above. Averages are also given for the several groups of trades and for all the trades combined. The averages for 1921 are made from the schedules that were obtained in May, 1921, and represent the wage rates existing May 15 of that year. The averages for 1920 were made from the schedules collected as of May 15 of that year.

AVERAGE UNION RATE OF WAGES PER HOUR IN TRADES SPECIFIED, FOR THE UNITED STATES, AS OF MAY 15, 1921 AND 1920.

Occupation.	May 15, 1921.	May 15, 1920.
Bakers	$0.930	$0.881
Building trades.		
Asbestos workers	1.040	1.025
Bricklayers	1.194	1.208
Bricklayers, sewer, tunnel and caisson	1.472	1.464
Building laborers	.760	.754
Carpenters	1.051	1.035
Carpenters, millwright	1.114	1.092
Carpenters, parquetry floor	1.248	1.245
Carpenters, wharf and bridge	.984	1.096
Cement finishers	1.097	1.065
Cement finishers' helpers	.815	.814
Cement finishers' laborers	.905	.907
Composition roofers	1.008	.949
Composition roofers' helpers	.699	.691
Elevator constructors	1.122	1.062
Elevator constructors' helpers	.808	.777
Engineers, portable and hoisting	1.096	1.080
Glaziers	.980	.998
Hod carriers	.870	.850
Inside wiremen	1.105	1.051
Inside wiremen, fixture hangers	1.049	1.004
Lathers (piece work)	[1] 6.810	[1] 6.700
Lathers (time work)	1.145	1.126
Marble setters	1.072	1.057
Marble setters' helpers	.869	.873
Mosaic and terrazzo workers	.983	.959
Painters	1.078	1.044
Painters, fresco	1.128	1.115
Painters, sign	1.242	1.203
Plasterers	1.220	1.154
Plastersre' laborers	.901	.878
Plumber and gas fitters	1.123	1.067
Plumbers' laborers	.847	.842
Sheet-metal workers	1.067	1.019
Ship carpenters	.907	.916
Slate and tile roofers	1.148	1.045
Steam fitters	1.026	1.071
Steam fitters' helpers	.689	.711
Stone masons	1.178	1.148
Structural-iron workers	1.144	1.115
Structural-iron workers, finishers	1.138	1.121
Structural-iron workers, finishers' helpers	.836	.826
Tile layers	1.061	1.065
Tile layers' helpers	.831	.814
Average for building trades	1.032	1.014

[1] per 1,000 laths.

AVERAGE UNION RATE OF WAGES PER HOUR IN TRADES SPECIFIED, FOR THE UNITED STATES, AS OF MAY 15, 1921 AND 1920—Concluded.

Occupation.	May 15, 1921.	May 15, 1920.
Chauffeurs, teamsters, and drivers.		
Chauffeurs	$0.588	$0.581
Teamsters and drivers	.585	.565
Average for chauffeurs, teamsters, and drivers	.586	.571
Freight handlers	.787	.776
Granite and stone trades.		
Granite cutters	1.070	.970
Stonecutters	1.100	1.065
Average for granite and stone trades	1.083	1.014
Laundry workers	.415	.397
Linemen	.933	.877
Metal trades.		
Blacksmiths	.875	.901
Blacksmiths' helpers	.664	.663
Boilermakers	.834	.831
Boilermakers' helpers	.636	.586
Coppersmiths	.972	1.001
Core makers	.845	.924
Machinists	.818	.831
Machinists' helpers	.613	.615
Metal polishers and buffers	.877	.923
Molders, iron	.837	.912
Pattern makers	1.104	1.144
Sheet-metal workers, railroad shops	.850	.850
Average for metal trades	.808	.818
Millwork trades.		
Carpenters	.946	.866
Glaziers	.981	.939
Painters, hardwood finishers	1.063	1.005
Average for millwork trades	.963	.887
Printing and publishing, book and job.		
Bindery women	.501	.445
Bookbinders	.891	.826
Compositors	.984	.854
Electrotypers:		
Batterymen and builders	1.060	.864
Finishers and molders	1.072	.962
Machine operators (piecework)	[1].146	[1].148
Machine operators (timework)	1.045	.910
Machine tenders	1.077	.949
Machinist-operators (piecework)	[1].150	[1].150
Machinist-operators (timework)	.975	.915
Photo-engravers	1.024	.961
Press assistants and feeders	.721	.668
Pressmen, cylinder	.998	.896
Pressmen, platen	.844	.730
Average for printing and publishing, book and job	.888	.789
Printing and publishing, newspaper.		
Compositors, day work	.996	.915
Compositors, night work	1.109	1.020
Machine operators, daywork (piecework)	[1].133	[1].143
Machine operators, daywork (timework)	.988	.943
Machine operators, nightwork (piecework)	[1].149	[1].171
Machine operators, nightwork (timework)	1.094	1.044
Machine tenders (machinists), daywork	1.050	1.010
Machine tenders (machinists), nightwork	1.164	1.127
Machinist-operators, daywork	.989	.744
Machinist-operators, nightwork	1.059	.955
Photo-engravers, daywork	1.045	.904
Photo-engravers, nightwork	1.215	.996
Pressmen, web presses, daywork	.879	.809
Pressmen, web presses, night work	1.076	.998
Stereotypers, daywork	.917	.790
Stereotypers, nightwork	1.068	.914
Average for printing and publishing, newspaper	1.027	.947
Grand average for all trades herein covered	.911	.884

[1] Rate per 1,000 ems.

Index Numbers of Union Wage Rates per Hour in the Building Trades and of Wholesale Prices of Building Materials, Compared.

THE years during and since the World War have witnessed radical changes in the wage rates of the building trades, and not only radical but spectacular changes in the prices of building material. To show relatively the changes that have taken place since 1913 the chart appearing on page 101 has been prepared.

Wholesale prices are available month by month, but union wage rates are available only as of May 15 each year, consequently their change from month to month can not be shown. However, the building trades wage rates have experienced no such wide fluctuation as have building material prices. So far as the large cities are concerned the union wage rate is the prevailing rate, if not the only rate, for the city.

Beginning with 1917 it will be seen that building material prices constantly advanced above building wage rates until 1920, in the spring of which year building material as a whole had reached triple the prices of 1913 and wage rates as a whole had doubled the level of 1913. Beginning with the spring of 1920 and continuing through into 1921 there was a heavy fall in building material prices. Building wage rates, however, held their position between 1920 and 1921. It will be observed that the line for the carpenters' wage rate practically coincides with that of all building wage rates combined.

With a decline in prices there was a decline in the volume of building material sold; statistics on this subject, however, are not available. During the same period while wage rates did not drop, there was a great reduction in earnings due to unemployment.

The building material index numbers may be found on pages 81 to 83; the index numbers for union wage rates per hour for all building trades combined, and for bricklayers and carpenters separately, are here given.

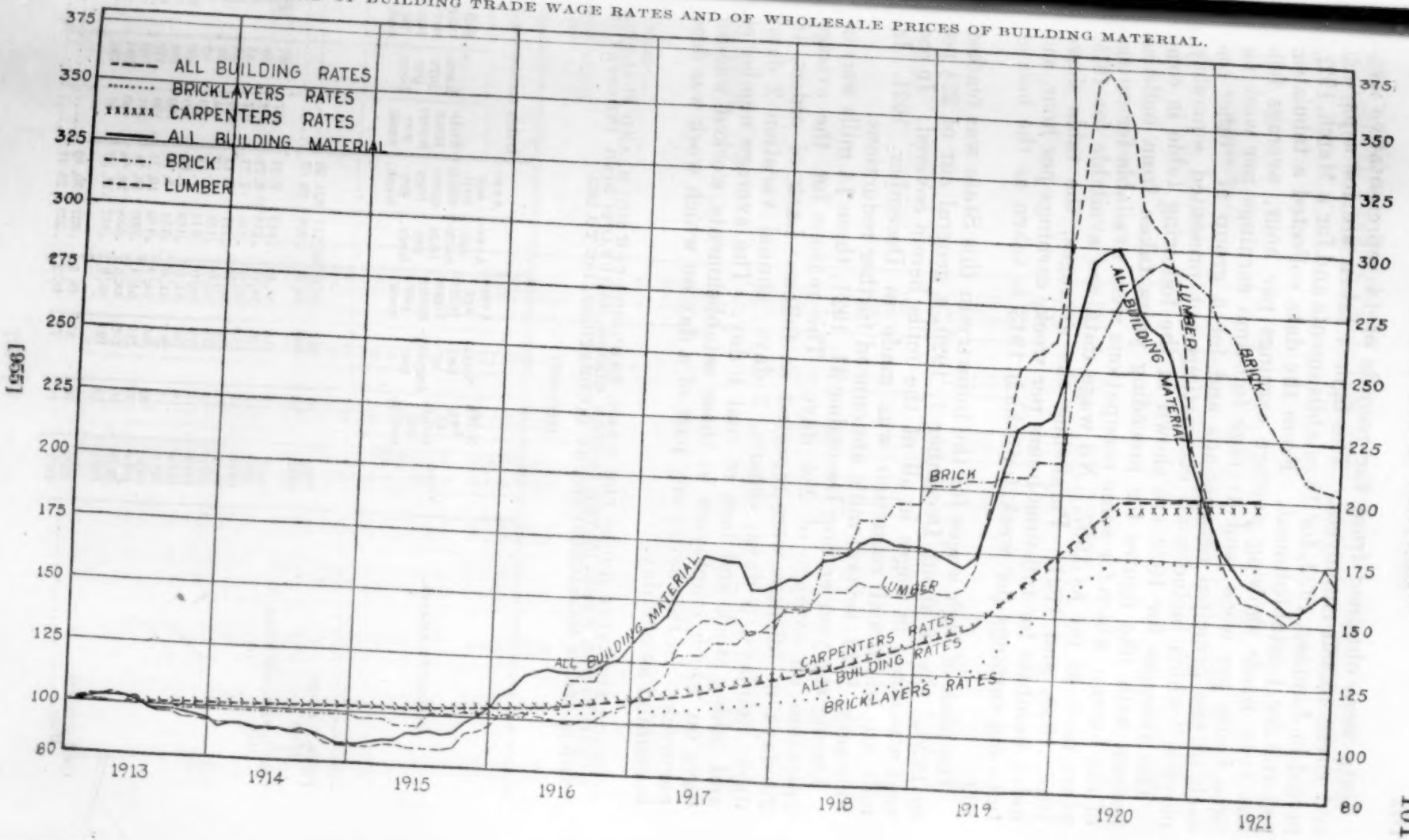
INDEX NUMBERS OF UNION WAGES PER HOUR IN THE BUILDING TRADES.

Date.	All building trades combined.	Bricklayers.	Carpenters.	Date.	All building trades combined.	Bricklayers.	Carpenters.
May, 1913	100	100	100	May, 1918	126	115	126
May, 1914	102	102	102	May, 1919	145	128	146
May, 1915	103	103	103	May, 1920	198	175	195
May, 1916	106	104	106	May, 1921	201	173	198
May, 1917	113	107	115				

Wages and Hours of Labor in the Cotton-Manufacturing Industry in Massachusetts.

THE United States Bureau of Labor Statistics in cooperation with the Division of Statistics of the Department of Labor and Industries of Massachusetts has recently made a partial survey of wages and hours of labor in cotton manufacturing in Massachusetts.

TREND OF BUILDING TRADE WAGE RATES AND OF WHOLESALE PRICES OF BUILDING MATERIAL.



Data were obtained from the records of 14 representative mills and cover 16,380 employees. The figures taken are for a pay-roll period in January, 1922, for 13 establishments and for a March, 1922, pay roll for 1 establishment. From the data collected a tabulation has been made showing average earnings per hour, average full-time hours per week, and average full-time earnings per week for each of the principal occupations and for a group of "other employees," which includes all occupations not presented separately.

The averages for 1922 are shown in the following table in comparison with like figures for preceding years taken from bulletins of the bureau, which for some occupations were available for certain years back as far as 1907. No wage data are available for 1915, 1917, 1919, and 1921. Paralleling the averages, the table shows index numbers for full-time hours per week, earnings per hour, and full-time earnings per week, for which 1913 is taken as the base or 100.

The peak of high wages for the industry in this State was reached in 1920. On or about December 1, 1920, a general cut of 22½ per cent was made in wages in all of the mills herein covered. In one mill an additional reduction was made in December, 1921. In February, 1922, several mills announced further reductions.

During the year ending December 31, 1921, these 14 mills were in operation an average of 284 days. The reasons for the average 29 days of idleness were reported as follows: Lack of orders, 16 days; holidays, 8 days; repairs, 2 days; annual vacation 2 days; and taking stock and lack of coal 1 day. The average number of days on which employees in these establishments worked was 5.6 per week. In this figure any part of a day on which work was done is counted as one day.

AVERAGE FULL-TIME HOURS PER WEEK, EARNINGS PER HOUR, AND FULL-TIME EARNINGS PER WEEK, IN THE COTTON GOODS MANUFACTURING INDUSTRY IN THE STATE OF MASSACHUSETTS, BY OCCUPATIONS, 1907 TO 1922.

[1913=100.]

Occupation and sex.	Year.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average earnings per hour.	Average full-time earnings per week.	Index numbers for—		
							Full-time hours per week.	Earnings per hour.	Full-time earnings per week.
Picker tenders:									
Male	1920	16	207	48.0	$0.511	$24.53	.....	.....	.....
	1922	13	160	48.2	.408	19.67	.....	.....	.....
Card tenders and strippers:									
Male	1907	11	115	58.0	.142	8.24	107	95	102
	1908	11	126	58.0	.133	7.71	107	89	96
	1909	11	112	58.0	.126	7.31	107	85	91
	1910	15	216	56.0	.127	7.11	104	85	88
	1911	18	278	56.0	.128	7.17	104	86	89
	1912	18	279	54.0	.144	7.78	100	97	97
	1913	18	283	54.0	.149	8.04	100	100	100
	1914	18	282	54.0	.151	8.17	100	101	102
	1916	20	255	54.2	.189	10.24	100	127	127
	1918	20	212	54.4	.303	16.51	101	203	205
	1920	16	219	48.6	.588	28.58	90	395	355
	1922	14	194	48.9	.437	21.37	91	293	266
Card grinders:									
Male	1920	16	87	48.5	.637	30.89	.....	.....	.....
	1922	14	77	48.2	.525	25.31	.....	.....	.....

AVERAGE FULL-TIME HOURS PER WEEK, EARNINGS PER HOUR, AND

AVERAGE FULL-TIME HOURS PER WEEK, EARNINGS PER HOUR, AND FULL-TIME EARNINGS PER WEEK, IN THE COTTON GOODS MANUFACTURING INDUSTRY IN THE STATE OF MASSACHUSETTS, BY OCCUPATIONS, 1907 TO 1922—Continued.

Occupation and sex.	Year.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average earnings per hour.	Average full-time earnings per week.	Index numbers for—		
							Full-time hours per week.	Earnings per hour.	Full-time earnings per week.
Drawing frame tenders:									
Male	1907	11	96	58.0	$0.115	$6.67	107	91	97
	1908	11	88	58.0	.116	6.73	107	91	98
	1909	11	102	58.0	.114	6.61	107	90	96
	1910	12	111	56.0	.113	6.33	104	89	92
	1911	17	179	56.0	.110	6.16	104	87	90
	1912	17	190	54.0	.125	6.75	100	98	98
	1913	16	159	54.0	.127	6.86	100	100	100
	1914	12	145	54.0	.133	7.18	100	105	105
	1916	14	119	54.3	.164	8.91	101	129	130
	1918	13	77	54.4	.247	13.44	101	194	196
	1920	11	95	51.7	.523	27.01	96	412	394
	1922	9	79	50.0	.361	18.05	93	284	226
Female	1907	7	71	58.0	.109	6.32	107	93	100
	1908	7	76	58.0	.111	6.61	107	97	105
	1909	7	71	58.0	.108	6.26	107	92	99
	1910	9	127	55.0	.099	5.54	104	85	88
	1911	14	156	56.0	.102	5.71	104	87	90
	1912	14	190	54.0	.117	6.32	100	100	100
	1913	15	220	54.0	.117	6.32	100	100	100
	1914	10	209	53.8	.119	6.40	100	102	101
	1916	14	210	53.9	.149	8.03	100	127	127
	1918	17	277	53.7	.226	12.17	99	193	193
	1920	15	283	47.9	.409	19.59	89	350	310
	1922	14	247	48.0	.314	15.07	89	268	238
Slubber tenders:									
Male	1916	20	166	54.0	.234	12.65	.....	.....	.....
	1918	20	152	54.0	.360	19.47	.....	.....	.....
	1920	16	129	48.0	.663	31.82	.....	.....	.....
	1922	14	126	48.0	.479	23.38	.....	.....	.....
Female	1916	6	23	54.0	.196	10.59	.....	.....	.....
	1918	6	25	54.0	.281	15.18	.....	.....	.....
	1920	3	33	48.0	.559	26.83	.....	.....	.....
	1922	4	31	48.0	.430	20.64	.....	.....	.....
Speeder tenders:									
Male	1913	2	38	54.0	.148	7.99	100	100	100
	1914	2	31	54.0	.144	7.78	100	97	97
	1916	19	205	54.0	.229	12.37	100	155	155
	1918	19	203	54.0	.346	18.69	100	234	234
	1920	15	184	49.5	.674	33.36	92	455	418
	1922	12	267	50.5	.501	25.30	94	339	317
Female	1907	11	365	58.0	.148	8.58	107	94	101
	1908	11	344	58.0	.152	8.82	107	96	103
	1909	11	351	58.0	.142	8.24	107	90	97
	1910	13	492	56.0	.143	8.01	104	91	94
	1911	18	693	56.0	.144	8.06	104	91	91
	1912	18	755	54.0	.157	8.48	100	99	99
	1913	18	773	54.0	.158	8.53	100	100	100
	1914	18	755	54.0	.160	8.64	100	101	101
	1916	20	1,041	54.0	.197	10.64	100	125	125
	1918	20	1,225	54.0	.291	15.70	100	184	184
	1920	16	1,034	48.0	.514	24.67	89	325	289
	1922	14	938	48.0	.402	19.30	89	254	226
Spinners, mule:									
Male	1907	5	88	58.0	.237	13.75	107	71	76
	1908	5	93	58.0	.232	13.46	107	69	74
	1909	5	60	58.0	.226	13.11	107	67	72
	1910	4	50	56.0	.224	12.54	104	67	69
	1911	6	115	56.0	.302	16.91	104	90	93
	1912	6	111	54.0	.339	18.31	100	101	101
	1913	6	117	54.0	.335	18.09	100	100	100
	1914	5	119	54.0	.339	18.31	100	101	101
	1916	7	155	54.0	.395	21.34	100	118	118
	1918	7	147	54.0	.537	28.98	100	160	160
	1920	5	141	48.0	.909	43.63	89	271	241
	1922	3	108	48.0	.751	36.05	89	224	199

AVERAGE FULL-TIME HOURS PER WEEK, EARNINGS PER HOUR, AND FULL-TIME EARNINGS PER WEEK, IN THE COTTON GOODS MANUFACTURING INDUSTRY IN THE STATE OF MASSACHUSETTS, BY OCCUPATIONS, 1907 TO 1922—Continued.

Occupation and sex.	Year.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average earnings per hour.	Average full-time earnings per week.	Index numbers for—		
							Full-time hours per week.	Earnings per hour.	Full-time earnings per week.
Spinners, frame:									
Male	1907	11	72	58.0	$0.142	$8.24	107	93	100
	1908	11	93	58.0	.134	7.77	107	88	94
	1909	11	81	58.0	.137	7.95	107	90	96
	1910	13	154	56.0	.128	7.17	104	84	87
	1911	16	402	56.0	.130	7.28	104	85	88
	1912	16	353	54.0	.160	8.64	100	105	105
	1913	11	203	54.0	.153	8.26	100	100	100
	1914	10	193	53.8	.158	8.50	100	103	103
	1916	16	229	54.0	.189	10.20	100	124	124
	1918	12	179	54.0	.296	16.05	100	193	194
	1920	8	95	49.9	.605	30.19	92	395	365
	1922	6	124	53.5	.375	20.06	99	245	241
Female	1907	11	774	58.0	.138	8.00	107	93	99
	1908	11	688	58.0	.132	7.66	107	89	95
	1909	11	845	58.0	.124	7.19	107	83	89
	1910	13	1,107	56.0	.131	7.34	104	88	91
	1911	18	1,384	56.0	.130	7.28	104	87	90
	1912	18	1,552	54.0	.144	7.78	100	97	97
	1913	18	1,714	54.0	.149	8.05	100	100	100
	1914	18	1,745	53.9	.150	8.09	100	101	100
	1916	20	1,739	53.9	.185	9.96	100	124	124
	1918	20	1,822	53.7	.277	14.84	99	186	184
	1920	16	1,642	47.9	.506	24.24	89	340	301
	1922	14	1,585	48.0	.386	18.53	89	259	230
Doffers:									
Male	1916	20	491	53.3	.183	9.78	.....	.....	.....
	1918	20	455	52.7	.278	14.68	.....	.....	.....
	1920	16	416	47.9	.519	24.86	.....	.....	.....
	1922	14	418	48.3	.403	19.46	.....	.....	.....
Female	1916	9	195	52.2	.165	8.65	.....	.....	.....
	1918	10	279	51.4	.256	13.20	.....	.....	.....
	1920	6	228	47.1	.423	19.92	.....	.....	.....
	1922	6	193	47.7	.344	16.41	.....	.....	.....
Spoolers:									
Male	1922	1	14	60.0	.448	26.88	.....	.....	.....
Female	1916	20	845	53.8	.169	9.11	.....	.....	.....
	1918	20	901	53.3	.252	13.34	.....	.....	.....
	1920	16	729	48.0	.473	22.70	.....	.....	.....
	1922	14	693	47.9	.353	16.91	.....	.....	.....
Creelers or tiers-in:									
Female	1920	9	110	47.8	.374	17.88	.....	.....	.....
	1922	11	116	48.0	.289	13.87	.....	.....	.....
Warper tenders:									
Male	1922	2	21	60.0	.473	28.38	.....	.....	.....
Female	1916	20	186	54.0	.192	10.38	.....	.....	.....
	1918	20	208	53.9	.275	14.80	.....	.....	.....
	1920	16	184	47.9	.492	23.57	.....	.....	.....
	1922	14	180	48.0	.387	18.58	.....	.....	.....
Beamer tenders:									
Male	1916	8	198	54.0	.313	16.92	.....	.....	.....
	1918	9	158	54.0	.476	25.68	.....	.....	.....
	1920	6	127	48.0	.778	37.34	.....	.....	.....
	1922	6	171	48.0	.608	29.18	.....	.....	.....
Female	1920	2	20	48.0	.739	35.47	.....	.....	.....
	1922	2	23	48.0	.385	18.48	.....	.....	.....
Slasher tenders:									
Male	1907	11	61	58.0	.221	12.82	107	94	101
	1908	11	55	58.0	.231	13.40	107	98	106
	1909	11	63	58.0	.219	12.70	107	93	100
	1910	13	99	56.0	.211	11.82	104	90	93
	1911	17	132	56.0	.211	11.82	104	90	93
	1912	17	138	54.0	.233	12.58	100	99	99
	1913	17	130	54.0	.235	12.69	100	100	100
	1914	17	138	53.9	.240	12.94	100	102	102
	1916	20	156	54.0	.286	15.47	100	122	122
	1918	20	158	54.0	.415	21.86	100	177	172
	1920	16	133	48.0	.706	33.89	89	300	267
	1922	14	147	48.0	.564	27.07	89	240	213

AVERAGE FULL-TIME HOURS PER WEEK, EARNINGS PER HOUR, AND FULL-TIME EARNINGS PER WEEK, IN THE COTTON GOODS MANUFACTURING INDUSTRY IN THE STATE OF MASSACHUSETTS, BY OCCUPATIONS, 1907 TO 1922—Concluded.

Occupation and sex.	Year.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average earnings per hour.	Average full-time earnings per week.	Index numbers for— Full-time hours per week.	Earnings per hour.	Full-time earnings per week.
Drawers-in:									
Female	1916	19	307	53.9	$0.215	$11.58	.....	.....	.....
	1918	19	284	53.7	.303	16.26	.....	.....	.....
	1920	16	217	47.9	.525	25.15	.....	.....	.....
	1922	12	205	48.0	.413	19.82	.....	.....	.....
Warp tying machine tenders:									
Male	1920	13	33	48.0	.681	32.69	.....	.....	.....
	1922	12	44	48.0	.527	25.30	.....	.....	.....
Loom fixers:									
Male	1907	11	194	58.0	.247	14.33	107	95	102
	1908	11	179	58.0	.242	14.04	107	93	100
	1909	11	194	58.0	.225	13.05	107	86	93
	1910	13	371	56.0	.228	12.77	104	87	91
	1911	18	544	56.0	.231	12.94	104	89	92
	1912	18	558	54.0	.259	13.99	100	99	99
	1913	18	595	54.0	.261	14.09	100	100	100
	1914	18	592	54.0	.264	14.26	100	101	101
	1916	20	670	54.0	.315	16.99	100	121	121
	1918	20	651	54.0	.455	24.59	100	174	175
	1920	16	617	48.0	.791	37.97	89	303	269
	1922	14	643	48.2	.620	29.88	89	238	212
Weavers:									
Male	1907	11	1,075	58.0	.179	10.38	107	98	106
	1908	11	1,063	58.0	.184	10.67	107	101	109
	1909	11	1,083	58.0	.161	9.34	107	88	95
	1910	12	1,625	56.0	.163	9.13	104	90	93
	1911	18	2,576	56.0	.164	9.18	104	90	93
	1912	18	2,903	54.0	.180	9.72	100	99	99
	1913	18	2,512	54.0	.182	9.83	100	100	100
	1914	18	2,517	54.0	.186	10.04	100	102	102
	1916	20	2,844	53.9	.225	12.16	100	124	124
	1918	20	2,410	53.9	.327	17.63	100	180	179
	1920	16	1,719	48.0	.598	28.70	89	329	292
	1922	14	1,967	48.4	.459	22.22	90	252	226
Female	1907	11	1,562	58.0	.162	9.40	107	98	105
	1908	11	1,700	58.0	.163	9.45	107	98	105
	1909	11	1,615	58.0	.151	8.76	107	91	98
	1910	13	2,605	56.0	.150	8.40	104	90	94
	1911	18	3,619	56.0	.148	8.29	104	89	93
	1912	18	3,813	54.0	.167	9.02	100	101	101
	1913	18	4,123	54.0	.166	8.96	100	100	100
	1914	18	3,889	54.0	.168	9.07	100	101	101
	1916	20	4,096	53.9	.206	11.13	100	124	124
	1918	20	3,785	53.9	.303	16.34	100	183	182
	1920	16	3,022	48.0	.548	26.30	89	330	294
	1922	14	2,858	48.0	.415	19.92	89	250	222
Trimmers or inspectors:									
Male	1920	2	8	48.0	.664	31.87	.....	.....	.....
	1922	2	5	48.0	.365	17.52	.....	.....	.....
Female	1907	11	88	58.0	.120	6.96	107	94	101
	1908	11	84	58.0	.121	7.02	107	95	102
	1909	11	94	58.0	.106	6.15	107	83	89
	1910	13	142	56.0	.107	5.99	104	84	87
	1911	17	203	56.0	.112	6.27	104	88	91
	1912	17	198	54.0	.125	6.75	100	98	98
	1913	17	178	54.0	.128	6.91	100	100	100
	1914	18	190	54.0	.128	6.91	100	100	100
	1916	20	267	53.5	.150	8.01	99	117	116
	1918	20	347	53.6	.208	11.34	99	163	164
	1920	16	282	47.8	.375	17.93	89	293	259
	1922	13	268	47.9	.303	14.51	89	237	210
Other employees:									
Male	1914	18	6,393	54.6	.172	9.37	.....	.....	.....
	1916	20	5,663	54.7	.207	11.36	.....	.....	.....
	1918	20	5,808	54.5	.311	16.98	.....	.....	.....
	1920	16	2,930	48.4	.490	23.72	.....	.....	.....
	1922	14	3,239	49.2	.375	18.45	.....	.....	.....
Female	1914	18	3,655	53.7	.135	7.27	.....	.....	.....
	1916	20	1,998	53.3	.157	8.38	.....	.....	.....
	1918	20	2,224	52.9	.275	14.60	.....	.....	.....
	1920	16	1,234	47.5	.368	17.48	.....	.....	.....
	1922	14	1,239	47.8	.318	15.20	.....	.....	.....

Wages and Employment in the Bituminous Coal Industry.

THIS bureau has received advance proof of a report [1] on wages and conditions of employment in the bituminous coal industry published by the Russell Sage Foundation. In the belief that no solution of the problem of human relations in this industry will be possible until the workers are given a reasonably continuous opportunity to work the attempt is made to show some of the economic facts behind the unrest of the miners.

For 32 years, from 1890 through 1921, the average number of days of operation of the bituminous mines of the country has been only 214 a year. The miners, of course, can neither work nor earn when the mine is not operating. Meanwhile the number of new bituminous mines has steadily increased. Instead of digging coal regularly throughout the year in those mines already in operation, many more have been opened than were required to supply the country's needs, with the result that mines and miners are idle for nearly a third of the working days of the year.

The miner has naturally sought rates of pay sufficiently high to enable him in his 214 working days to earn enough to maintain himself and his family throughout the year. The operator, seeking to keep down costs, compares these rates with the hourly or daily earnings in other industries as evidence that the miner is overpaid, but he does not usually take into account the more regular employment in other occupations. The public, eager for lower prices for coal, is not in sympathy with any demand of labor which would seem to lead to higher prices. Thus the attention of all three groups is fixed on the wage rate, over which a conflict of interests develops, while the irregular operation of the bituminous mines, which is the cause of the unfortunate combination of high rates and low earnings, receives no effective consideration.

Capacity and Production of Mines.

THE capacity of American bituminous coal mines is estimated by the Bituminous Coal Commission as over 700,000,000 tons and by the statistician of the United States Geological Survey at 800,000,000 tons or more, while less than 500,000,000 tons are required. The bituminous coal industry, it is said "was probably never more heavily overdeveloped than it is to-day." This overdevelopment is reflected in the spreading of work over too many mines and among too many men. Figures for the shipping mines of Illinois show that during the year ending June 30, 1919, the average number of days of operation was only 190. The small mines averaged fewer days of operation than the larger ones. The size of the mine is, however, not the controlling factor in production. The thickness of the seam of coal, the use of machinery, and other surrounding conditions are probably more important than the size of the mine. Some mines were open as few as 120 days in the year, while one was recorded as having less than 70 days of operation. The largest group operated between 190 and 199 days. Only one mine worked as many as 300 days in the year.

If the same rate of production had been continued for 304 days the State's output of coal in that year could have been secured from about 35 per cent of the mines, with steady work for 64 per cent of the miners. "Thus, the facts seem to show that insecurity of employment for the miner of bituminous coal results from the operation of more mines and the employment of more miners than the industry can reasonably support."

[1] Russell Sage Foundation. The Coal Miners' Insecurity, by Louis Bloch. New York, 1922. 50 pp.

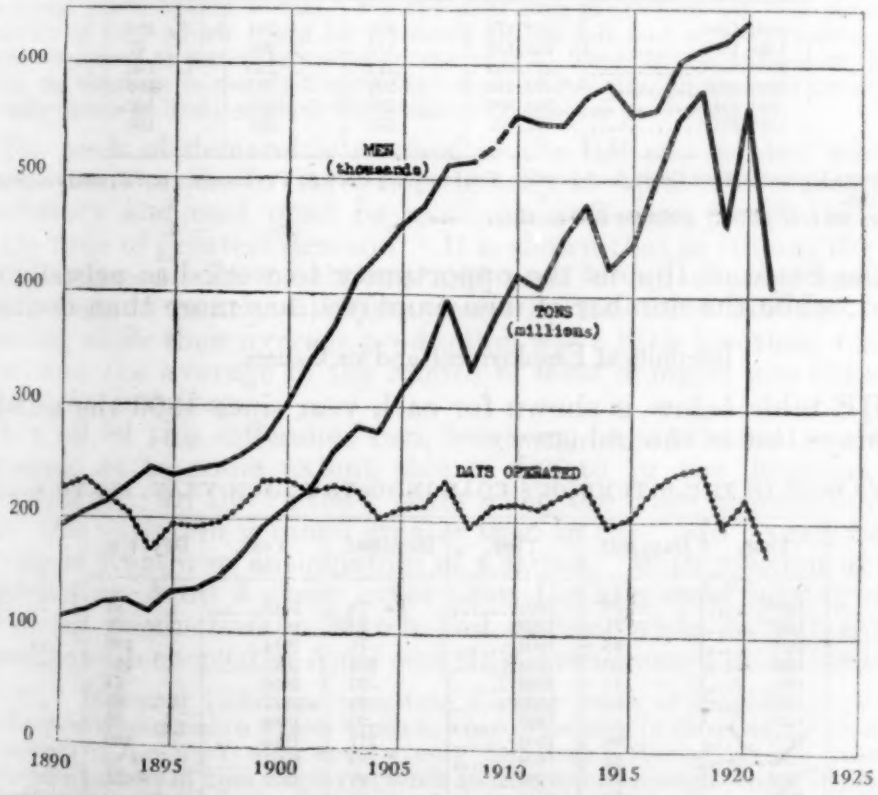
The bituminous coal industry has grown steadily during the three decades since 1890, and unemployment among the miners during a large part of the year has been a constant feature of the industry. This is shown in the table and chart below. As is seen, the chart shows the trend of employment in 1920 and 1921, while the data in the table include only as far as 1919. The diagram for 1920 and 1921 is based upon preliminary figures.

AVERAGE ANNUAL PRODUCTION AND ESTIMATED FULL-YEAR PRODUCTION OF BITUMINOUS COAL MINES IN THE UNITED STATES FROM 1890 TO 1919, BY FIVE-YEAR PERIODS.[1]

Period.	Average number of tons produced per per year.	Average days in operation per year.	Average number of tons per day.	Possible tonnage at same rate per full year of 304 working days.	Excess of full-year over average annual production.	
					Tons.	Per cent.
1890-1894	120,653,153	211	571,816	173,832,064	53,178,911	41
1895-1899	156,058,560	205	761,261	231,423,344	75,364,784	48
1900-1904	251,954,028	223	1,129,839	343,471,056	91,517,028	36
1905-1909	353,002,993	213	1,657,291	503,816,464	150,813,471	43
1910-1914	434,852,490	216	2,013,206	612,014,624	177,162,134	41
1915-1919	506,876,698	224	2,262,842	687,903,968	181,027,270	35

[1] Data for production and average days of operation for each year from United States Geological Survey, Coal in 1918, Part A, Production, pp. 711, 717; and subsequent publications of United States Geological Survey.

TREND OF EMPLOYMENT AND OF PRODUCTION, 1890 TO 1921.



As the table shows, if a working year of 304 days had been maintained, an excess of 36 per cent of the average annual production would have been produced. "This excess of capacity over production represents a surplus of many thousand men employed in the industry."

The increase in demand for coal has not resulted in the more regular operation of mines already open. New mines have been opened and more men employed, while the number of working days has shown no appreciable increase.

Moreover, * * * the small mines increased in numbers in the period between 1913 and 1917 more rapidly than the large ones—a fact which makes more complicated the problem of stabilizing the industry since regulation of small, scattered, and unstable operations is difficult.

* * * In 1917 the mines in the United States numbered 6,909, which was an increase of 1,133 mines, or 20 per cent over 1913. In 1917 the smaller mines were more numerous, in proportion to large ones, than in 1913, when the number producing on the average less than 50,000 tons annually was 3,286, or 57 per cent of all mines. By 1917 this number had increased to 4,159, or 60 per cent of the bituminous mines of the country, but these 60 per cent produced only 11 per cent of the total tonnage. In 1917 the mines with an output of 100,000 tons or more constituted 25 per cent of all the mines but produced 75 per cent of the total output of coal, while the other 75 per cent of the mines together produced only 25 per cent of the coal.

That the increase in mines has been accompanied by an increase in miners, rather than by more regular employment for those already in the industry, is shown in the table below:

AVERAGE AND RELATIVE NUMBER OF EMPLOYEES AND OF DAYS OF OPERATION FOR BITUMINOUS COAL MINES IN THE UNITED STATES FROM 1890 TO 1919, BY FIVE-YEAR PERIODS.[1]

Period.	Number of employees.		Number of days of operation.	
	Average.	Relative.	Average.	Relative.
1890–1894	217,174	100	211	100
1895–1899	251,739	116	205	97
1900–1904	373,655	172	223	106
1905–1909	[2] 492,144	227	213	101
1910–1914	561,866	259	216	102
1915–1919	591,801	273	224	106

[1] Data from United States Geological Survey, Coal in 1918, Part A, Production, p. 717, and subsequent publications.
[2] Average for four years. Data for 1909 lacking.

In the State of Illinois the opportunity to work has actually decreased, while the number of men employed has more than doubled.

Intermittent Employment and its Causes.

IN THE table below is shown for each year since 1890 the number of days lost in the industry:

DAYS LOST IN THE BITUMINOUS COAL INDUSTRY EACH YEAR, 1890 TO 1921.[1]

Year.	Days lost.	Year.	Days lost.	Year.	Days lost.
1890	78	1901	79	1912	81
1891	71	1902	74	1913	72
1892	85	1903	79	1914	109
1893	100	1904	102	1915	101
1894	133	1905	93	1916	74
1895	110	1906	91	1917	61
1896	112	1907	70	1918	55
1897	108	1908	111	1919	109
1898	93	1909	89	1920	[2] 84
1899	70	1910	87	1921	[2] 134
1900	70	1911	93		

[1] Based on figures of the United States Geological Survey for average days of mine operation, assuming a full year of 304 days. The figures from which the table has been derived are those for average days of mine operation. The days lost were ascertained by subtracting the days of operation from the standard of a full operating year which has been adopted; that is, 304 days.
[2] Based on preliminary figures for days operated.

Three factors have been found by the Geological Survey to be principally accountable for lost time in the industry. These are business depression, overdevelopment, and seasonal demand, estimated to be accountable for 16, 37, and 47 per cent of lost time, respectively.

The reader may be surprised to find in this analysis no reference to "railroad-car shortage," or to strikes as causes of idleness, since these are named frequently in the public press as the chief troubles of both operator and miner. In an article in the Survey Graphic [2] two members of the statistical staff of the Geological Survey explain why they do not regard car shortage and strikes as primary causes of the miners' "broken year."

"Losses due to strikes," they say, "are spectacular when they occur and in the last 20 years have mounted up to the enormous loss of 125,000,000 man-days.[3] But the time lost on account of strikes is only 10 per cent of the total time lost, and it may be questioned whether much more coal would have been produced in the aggregate during that 20-year period if there had been no strikes. * * * More commonly strikes have been discounted in advance by accumulating large reserves of storage coal. * * * In terms of man-days lost because of strikes, the year 1910 was the record. Yet it also set a new record of production, and the average sales realization f. o. b. mine—the best index of prices, all things considered—did not differ greatly from that of the year before nor of the year immediately after. Strikes and labor disturbances, therefore, like car shortage, must be classed as secondary rather than primary causes of nonoperation."

Of car shortage they say: "No doubt we need more cars, but simply increasing transportation facilities will not mend the broken year of the coal miner. * * * More cars * * * will not sell more coal. They will merely affect the distribution of working time through the year, tending to increase it in the periods of peak demand and to make it still less than now in periods of low demand. Car shortages have occurred not infrequently, but it is a curious fact that rarely have they curtailed the actual consumption of coal. For the most part their effect has been to limit the quantity of coal which could be produced in the fall and winter, thereby forcing some consumers to purchase earlier in the year." Thus, in the opinion of these experts, car shortage is merely a secondary cause of lost time in the coal industry and actually tends to limit extreme fluctuations in seasonal production.

The peak of demand is reached in the fall and winter, while the lowest point occurs in the spring, usually in April. This means that machinery and men must be available sufficient to fill the orders at the time of greatest demand. It is shown that in Illinois the mines were equipped with machinery and men for an average maximum production of nearly 5,500,000 tons in the busy fall and winter months, while their average production was a little less than 4,250,000 tons, and the average in the month of least demand was little more than 2,000,000 tons.

Not all of this difference can, however, be attributed to seasonal demand, as to some extent this is due to to the biennial wage adjustment. In the "even" years when the wage negotiation takes place the variation is much greater than in the "odd" years because buying is greater in anticipation of a strike. With revision of wages expected on April 1 every other year, the abnormal buying of coal forces up production in March and earlier, while output is correspondingly decreased in April and May, even though no strike occurs.

* * * Seasonal variations constitute a major cause of irregular employment. The increased demand in winter tends to keep more men in the industry than would be needed if the work were more evenly distributed throughout the year. This excess in numbers of men employed tends in turn to make employment irregular and uncertain, regardless of variations in market demands. It is important to realize that increased storage facilities, reduced transportation rates during the slack months, and

[2] The Broken Year of the Bituminous Miner, by F. G. Tryon and W. F. McKenny, in Survey Graphic, Mar. 25, 1922, p. 1012.
[3] Includes strikes in the anthracite region, which account for 33,000,000 man-days.

other means of eliminating seasonal fluctuations, desirable as these improvements are, would not wholly regularize the operation of the coal industry. From estimates of the Geological Survey already quoted it is shown that seasonal fluctuations are responsible for 47 in every 100 days of idleness in the mines during a year, but 37 in every 100 are lost through what the Geological Survey calls "sheer overdevelopment." These estimates are more or less speculative, because the three big problems of seasonal demand, overdevelopment, and recurrent business depressions are so related to one another that the effect of each on the industry can not be accurately determined. It is safe to conclude, however, that the soft coal industry is functioning irregularly, and that its instability causes unemployment and uncertainty for the men who earn their living in digging coal.

Instability affects also the efficiency of the coal business and tends to raise the price of coal and hence the cost of all articles dependent upon coal for manufacture or transportation. So little information is available, however, on the various factors entering into the price of coal that it is possible only to suggest, but not to demonstrate the effect of instability in bituminous coal mining upon business in general. That the coal miner and his wife and children are the first to feel the effects of this irregular functioning of the industry needs no elaborate proof, despite the fact that data on earnings are as meager as are many other relevant facts about the coal industry.

Earnings of Miners.

FACTS about miners' earnings, the report states, and the suffering which unemployment causes, can be understood only if conditions of life in a mining camp are known.

* * * In many mining communities the mine is the only place of employment. To find another job in dull periods means moving to another town. Moreover, a miner's family lacks the economic safeguards of life in a community with several varied industries, in which other members of the family, including wife and daughters, find work to help to secure the necessary income. However desirable, or undesirable, the employment of women and young girls outside the home may seem to the public, it is still the means of maintaining the households of many wage earners, when dependence upon the insecure employment of one breadwinner in a seasonal industry becomes too hazardous. For many coal miners this resource is lacking. The industry necessarily becomes responsible for insuring sufficient income to the men in the mines to maintain their families throughout the year. This fact must never be forgotten when comparisons are made between the rates paid in mining and those in other industries.

Data submitted to the President's Bituminous Coal Commission in 1920 by the United Mine Workers of America show earnings in the union mines of the central competitive field for the years 1913 to 1918. These figures are shown in the table below:

AVERAGE ANNUAL EARNINGS OF MINERS AND AVERAGE DAYS OF MINE OPERATION IN THE FOUR DISTRICTS OF THE CENTRAL COMPETITIVE FIELD, 1913 TO 1918.

Year.	Western Pennsylvania.		Illinois.		Indiana.		Ohio.	
	Average annual earnings.	Average days in operation.	Average annual earnings.	Average days in operation.	Average annual earnings.	Average days in operation.	Average annual earnings.	Average days in operation.
1913	$867	237	$705	189	$708	190	$766	206
1914	776	207	650	173	630	168	405	[1] 108
1915	781	210	672	179	672	179	528	142
1916	895	229	775	198	732	187	771	197
1917	1,027	251	995	243	904	221	859	210
1918	1,583	260	1,390	228	1,516	249	1,364	224
Average	988	232	865	201	860	199	782	181

[1] Low number of days operated in Ohio in 1914 is partly explained by the strike in Ohio mines in that year.

this report has computed annual earnings at these rates for a working year of 249 days. It was found that, for the 11 fields

Differences from year to year in days of operation are reflected directly in differences in earnings. In the period covered [above] the miners of the central competitive field received increases in their rates of pay in 1914, 1916, and twice in 1917. In spite of the increase in rates in 1914, the average wages were lower in 1914 and in 1915 than they had been in 1913. This was evidently because the days of mine operation decreased in 1914 and 1915 owing to the business depression in those years. The significant point is that the average annual income of miners, like that of wage earners in other irregular industries, is reduced by lack of opportunity for employment, and irregularity of work may more than nullify increases in rates of pay. This should not be understood to mean that increases in rates of pay are unimportant to the miner, or that he can be indifferent to decreases. Quite the contrary is true. The fact that he works so much less than full time is his justification for seeking higher rates.

Figures for 1919 derived from the census reports show that in that year the average earnings of the miners in Pennsylvania amounted to $1,318 and the days of operation to 218; in Illinois earnings for 160 days' work averaged $1,110; in Indiana for 148 days' work, $1,062; and in Ohio for 164 days' work, $1,102.

These earnings are distinctly lower for each State than those given by the union for 1918. The year 1918 was more prosperous for the miner than 1919, because he had more days of work and this would account mainly for the differences. Certainly it does not appear that the union understated the miners' earnings in order to make a case for an increase.

In the following table are shown the actual earnings and the earnings that would have been received had the miners had a full working year of 304 days:

ACTUAL EARNINGS AND ESTIMATED FULL-YEAR EARNINGS OF MINERS IN THE FOUR DISTRICTS OF THE CENTRAL COMPETITIVE FIELD IN 1913 AND IN 1918.

District and year.	Average annual earnings.	Days of mine operation.	Average earnings per day of mine operation.	Possible earnings at this rate in 304 days.	Difference between actual and full-year earnings.	Per cent actual earnings are of full-year earnings.
1913:						
Illinois	$705	189	$3.73	$1,134	$429	62
Indiana	708	190	3.73	1,134	426	62
Ohio	766	206	3.72	1,131	365	68
Western Pennsylvania	867	237	3.66	1,113	246	78
1918:						
Illinois	1,390	228	6.10	1,854	464	75
Indiana	1,516	249	6.09	1,851	335	82
Ohio	1,364	224	6.09	1,851	487	74
Western Pennsylvania	1,583	260	6.09	1,851	268	86

In 1918, which was the year of maximum production during the war, the number of days of mine operation was decidedly larger than in 1913. Nevertheless, though basic rates and more regular work resulted in higher average earnings in 1918 than in 1913, the days of operation were still considerably less than a full working year, and the actual earnings were less than the estimated possible earnings for 304 days by $268 per miner in western Pennsylvania, $335 in Indiana, $464 in Illinois, and $487 in Ohio. The estimated possible annual earnings in 1918 were $1,854 in Illinois and $1,851 in each of the other districts.

The coal operators submitted to the Coal Commission figures showing for 1919 the average daily earnings of miners who worked every day that the mine loaded coal. No statement was made of annual earnings. From the figures given, however, the author of

this report has computed annual earnings at these rates for a working year of 249 days. It was found that, for the 11 fields covered, the annual earnings of pick miners would average $1,579, of loaders $1,492, of machine miners $1,760, and of inside day laborers $1,277.

The chief difference in the testimony regarding earnings offered by operators and union officials to the President's Bituminous Coal Commission was that the operators stressed the effect of voluntary idleness of the miner, which they contended was the chief reason for low earnings.

A special inquiry would be necessary to analyze the causes of absenteeism. The Bituminous Coal Commission in its final report to the President pointed out a weakness in these figures of the operators, and made the following comment upon them:

"The contention of the operators has been that the miners do not make full use of the opportunities for labor afforded them and that those of the miners who work at least three-fourths of the available time earn sufficient wages. In support of this contention the operators submitted figures collected from a representative number of mines showing the number of men working each specified number of days, with their daily and monthly wages.

"We realize that a certain proportion of time is lost by the miners voluntarily. At the same time, we find that the figures submitted by the operators do not afford a measure of the amount of time so lost by the miners, for the reason that these figures make no allowance for the turnover. In these tabulations every man who worked at a mine at any time during the month is counted on the same basis as one who was on the roll every day the mine was in operation, regardless of the fact that many miners may have obtained employment on the last day of the month or been discharged at the end of the first day or moved to another mine in the middle of the month or died sometime during the period.

"A man who worked 13 days out of a possible 26 at one mine and 13 at another would be counted in these figures as two men with an aggregate voluntary absenteeism of 26 days or 50 per cent of the 52 working days for the two mines."[4]

The report then goes on to discuss the psychological causes of absenteeism:

But even after allowance has been made for all the factors entering into the problem a margin remains between the number of days that the miners actually work and the number when they have an opportunity to work. A fair interpretation of this margin is that an irregular industry breeds irregular habits among the workers. When the men are not accustomed to going to work regularly every morning the incentive for regularity becomes less potent and a certain amount of absenteeism inevitably results. This is the psychological factor of irregularity, and it may be expected that it will disappear in large measure as the industry becomes more stable.

Figures published by the United States Bureau of Labor Statistics[5] are given and the following paragraph is quoted:

From the figures given * * * the immediate responsibility for idle time may be roughly apportioned between the management and the employees. Thus, the average full-time hours of all mines in which hand miners were found were 102.5 for the half month. Hand miners actually worked an average of 60 hours. The difference, 42.5 hours, was the amount of lost time on the part of the hand miners. But of these 42.5 idle hours there were on the average 31.4 hours during which the mines were not in operation. For that amount of idleness, therefore, the operators were immediately responsible. The remaining 11.1 hours of idleness represent the time during which the mines were in operation and opportunity for work was given of which the employees failed to take advantage. For that much idleness, therefore, the miners were immediately responsible.

For all machine miners combined the figures show average hours of idleness 31.1, of which the operators were responsible for 26.4 hours and the miners for 4.7 hours. The corresponding figures for loaders are 39.4, 23.5, and 15.9, respectively.

[4] United States Bituminous Coal Commission, majority and minority reports to the President, 1920, p. 44.

[5] In MONTHLY LABOR REVIEW, December, 1919, p. 224.

Average earnings in the metals, machinery, and conveyances industry group were slightly less in February than in Janua

Cost of Living.

THE report points out that "facts about annual earnings are significant only if they are measured in terms of cost of living." In the hearings before the Bituminous Coal Commission the miners' representatives submitted two budgets, one to provide for a "minimum of subsistence" and the other for a "minimum of comfort." To meet these budgets an annual income of $1,603 and $2,244, respectively, would be required. The report states, in this connection:

> The miners might earn a reasonably comfortable living if they could work the year round. The lack of opportunity to work so many days in a year reduces their income to what the miners contend is often not even a bare subsistence.
>
> In brief, the alternative to raising rates of pay is to increase the regularity of the opportunity for work at the present rates. The miner may well ask for a guaranteed minimum of employment as more important than higher rates of pay. The necessity for regarding a minimum of employment as a fixed charge upon the industry would probably make operators more reluctant to open new mines or unduly to enlarge those already open. To make employment regular is important not only for the miner, but for the economical conduct of the industry. Capital, as well as men, is wastefully used when money and energy are invested on a scale which could produce much more coal than can be sold.

Average Earnings of New York State Factory Workers in February, 1922.

ACCORDING to a statement issued by the New York State Department of Labor, based on reports from 1,648 representative manufacturers, the average weekly earnings of factory workers in the State decreased from $24.34 in January to $24.17 in February, 1922. The chief factor causing the reduction was the fact that a considerable number of the factories were closed on Lincoln's Birthday, which fell within the period covered by the reports. Wage-rate reductions in some industries and seasonal inactivity in others contributed to the decrease in average earnings. The increased average earnings that were reported in some industries were the result of better business conditions in some instances and in others were due to increased seasonal activity. The reduction in earnings affected New York City factory workers chiefly. The average weekly earnings in New York City were $25.77 and in the remainder of the State $23.19.

The largest reduction in average weekly earnings occurred in the printing and paper goods group of industries. Substantial reductions in earnings were reported in the stone, clay, and glass products and the sawmill and planing-mill products groups. Minor decreases took place in the chemicals, oils, and paints, and the textile groups. The leather-tanning industry reported the only increase in average earnings in the furs, leather, and rubber-goods group of industry.

Although there was an increase in employment in the food, beverages, and tobacco products group, average earnings showed a reduction. The chief decreases in the earnings of employees occurred in the tobacco products, confectionery, and meat and dairy products industries. Average earnings increased in the bakery products industry, and a small gain occurred in the groceries division because of greater activity in the sugar refineries.

Average earnings in the metals, machinery, and conveyances industry group were slightly less in February than in January. However, there were some rather wide fluctuations among the individual industries. The shipbuilding industry showed the largest decrease, because of reduced wage rates. Substantial reductions occurred in the brass and copper, iron and steel, structural and architectural iron, sheet-metal, and hardware industries. Decreases also occurred in the machinery industry. The greatest gain in earnings occurred in the railway equipment and repair industry. A substantial increase was also reported in the gold, silver, and jewelry industry, and minor gains occurred in the fire-arms and cutlery, and in the cooking, heating, and ventilating apparatus industries.

The clothing industries group, alone of the chief industry groups, reported an increase in average earnings, and this in spite of the fact that in the men's clothing industry a reduction in earnings occurred.

Average weekly earnings in the 11 chief industry groups in February were as follows:

Stone, clay, and glass products	$22.86
Metals, machinery, and conveyances	25.36
Wood manufactures	23.57
Furs, leather, and rubber goods	23.18
Chemicals, oils, paints, etc	24.96
Paper	25.95
Printing and paper goods	28.92
Textiles	19.60
Clothing, millinery, and laundering	23.72
Food, beverages, and tobacco	22.85
Water, light, and power	32.67
Total	24.17

Sliding Wage Scale in Germany.

Wage Policy Advocated by the German Minister of Labor.

A RECENT issue of the Reichs-Arbeitsblatt[1] contains an article by Dr. Brauns, the German minister of labor, in which he outlines how the idea of a sliding wage scale could be adopted to best advantage in a wage-fixing policy. He says:

The passionate wage struggles of recent times, which are a phenomenon due to the increase by leaps and bounds in the cost of living, have once more aroused interest in the problem whether a better adjustment of wages and salaries to the cost of living and one involving less friction could not be devised and put into practice. One side supports with great energy the so-called sliding wage scale, i. e., an automatic adjustment of wages to the changing cost of living, because it hopes to prevent through it a lowering of the standard of living of the working population and at the same time to avoid labor disputes in a greater measure than hitherto. The other side fears, however, that such an automatic adjustment of wages to the cost of living would remove the last dam against the unrestrained upward climbing of prices and thus only increase the economic distress of the German Nation. The German Ministry of Labor, which is in the first instance the competent authority with respect to a wage policy, has always given the most serious consideration to this problem and investigated thoroughly and without prejudice all proposals and experiments made in this direction. As a result of its experience the ministry has become convinced that a thoroughly justified idea inheres in the sliding wage scale, which can produce much good under present-day conditions,

[1] Reichs-Arbeitsblatt. Berlin, February 28, 1922.

There seems to be some justification in the objections raised against the sliding wage scale from the point of view of a price policy. In the case of automatic adjustment of wages to rising prices, producers as well as dealers can be certain that

provided that one discerns the problem in its true inwardness and avoids indiscriminate and mechanical adoption.

The solution of the problem presupposes in the first place a reliable and trustworthy measurement of the changes in the cost of living. Great technical difficulties inhere already to this part of the task. The German Ministry of Labor has attempted to overcome these difficulties by initiating the publication of official cost-of-living index numbers based on regular investigations. The data for the computation of these index numbers are being furnished by a large number of municipalities which data, under the supervision of employers' and workers' representatives, determine monthly the normal costs of existence of a workman's family of five persons. The reliability of these official index numbers has been questioned by many. At first such criticism may have had some justification as the determination of prices encountered great difficulties owing to the newness of the task and the then still existing Government control of most necessaries of life. Meanwhile, the ministry has succeeded in overcoming these difficulties more and more. The reliability of the cost-of-living statistics has been increased through inclusion in them of further necessary commodities, especially of clothing, and to-day criticism of these statistics seems no longer justified.

The extreme adherents of the sliding wage scale demand that wages be increased or decreased at regular, possibly monthly, intervals, in accordance with the cost-of-living index numbers and without any negotiations. In making this demand they forget that, in addition to the cost of living, there are other important circumstances that determine the rate of wages. It is impossible to leave entirely out of consideration the economic situation of an industry branch or of the entire country in its effect upon wage rates.

A mere mechanical adjustment of wages would make it impossible to take into account the depression in an industry branch, or, vice versa, to grant to the workers a fair share in the prosperity of an industry. These examples demonstrate already that the sliding wage scale can not and shall not supplant new collective wage negotiations in which the distribution of the net earnings of production between capital and labor can be regulated. Its introduction would not do away with wage struggles. It would merely eliminate the cost of living as a factor in such struggles during periods of heavy fluctuations in the cost of living. Now, as before, it would have to be left to collective negotiations to determine the influence of all other factors upon wage rates. These negotiations will also offer occasion to examine whether the increased cost of living can not be counteracted by measures relating to organization and increased production.

There are also other weighty objections to a wage policy which in determining wage rates considers exclusively the cost of living. The wages current at a given point of time have developed historically. They have not grown naturally either as regards their absolute amount or in the relation of the individual occupational groups to each other, but in many instances their development has been influenced by accidental causes. The wages paid at a given point of time can not therefore be forthwith designated as the proper basic wage, and by the introduction of a mechanically sliding wage scale this basic wage would be perpetuated. If, for instance, a group of workers for some reason is being paid an unduly high or low wage at the moment when the sliding of the wage begins, the advantage or disadvantage arising therefrom for these workers would be permanently maintained. The Ministry of Labor has for a number of typical occupations made computations which compare the actually paid wages with wages that would have been paid if a sliding wage scale had been introduced. These statistics, which will be discussed on a subsequent page, show that in some instances the curve of the actual wages went beyond the curve of the wages that would have been paid in accordance with a sliding wage scale based on the cost-of-living index. From this fact it must, however, not be concluded that in these instances the workers were overpaid. The great divergence of the two curves may be due to the fact that at the time when the sliding wage scale was introduced the wage of the workers in question was very low as compared with that of other workers and that this disadvantage has meanwhile been equalized. As a matter of fact, the statistics mentioned above show that in occupations with the relatively lowest basic wage the wage curve based on a sliding scale remains far behind the curve of the actually paid wages, while in other instances the two curves converge ultimately. In introducing a sliding wage scale it is therefore absolutely necessary to examine minutely whether the wage on which the scale is based really corresponds to actual conditions. This point of view, which indicates the great value of reliable wage statistics, has hitherto been entirely overlooked in nearly all discussions of the sliding wage scale.

In other words, beginning with a certain point of time wage schedules

There seems to be some justification in the objections raised against the sliding wage scale from the point of view of a price policy. In the case of automatic adjustment of wages to rising prices, producers as well as dealers can be certain that the purchasing power will always adjust itself to the increased prices and that important hindrances which otherwise would counteract price increases will be eliminated. If, on the other hand, a fall of prices were automatically followed by a reduction of wages, there would be no possibility of granting to the workers a breathing space for economic recovery.

All these considerations speak against a purely automatic adoption of the sliding wage scale. They can, however, detract nothing from the justification of its basic idea, that of a quicker and much more frictionless adjustment of wages to the cost of living.

In the long run wages must adjust themselves to the cost of living. This is being confirmed by all statistics. The computations made in the Ministry of Labor have shown that in times of very violent price fluctuations one is rather inclined to overestimate these in their significance. The main thing is that the process of adjustment of wages to the cost of living takes place with less friction and with the greatest possible exclusion of all effects disturbing economic life. This is not only essential for a sound wage and economic policy but is also an urgent requirement for the household of the individual workman, salaried employee, and official in order to give to it a certain steadiness. Allowance for this requirement can of course be better made if wage scales are subject to regular revision at short intervals on the basis of the cost-of-living index numbers than if the necessary adjustment is always to be effected through new negotiations, which very often are accompanied by serious struggles. The danger of the wages agreed upon becoming too low in view of the actual development of the cost of living and as a consequence collective agreements being broken and the economic peace disturbed can, under existing conditions, be avoided only through regular revision of wage scales. This is also the only way that makes it possible to conclude long-term collective agreements without danger of either of the two parties getting into an unbearable economic situation.

According to the aforesaid, the valuable idea on which the sliding wage scale is based can be best made use of by combining the system of the sliding wage scale with a determination of wage rates at short intervals by a wage board. This could be done by providing in collective agreements for the establishment of wage boards which are to revise the wage scales at short fixed intervals on the basis of the cost-of-living index numbers. The procedure of the wage boards would have to be the following: First of all, they should determine the change in wage rates to be made on the basis of the cost-of-living index; then the two parties to the collective agreement should be given an opportunity to discuss other circumstances requiring a determination of wage rates deviating from that based solely on the cost of living. If an agreement can not be reached, the wage board should make an award, which perhaps could, within certain limits, be made binding upon both parties in accordance with a previous voluntary agreement. Although this method does not do away with negotiations, it would nevertheless eliminate the most frequent controversial point, the dispute as to how much the cost of living has increased or decreased, and thus would, within possible limits, safeguard the economic peace. The favorable experiences hitherto made with this system at Flensburg and Breslau, in spite of the difficult conditions existing there, confirm the aforesaid and deserve more extensive imitation.

Actual Wages in Germany and Wages Based on Cost of Living, 1920 and 1921.

AS HAS been mentioned on a preceding page, the German Ministry of Labor has made computations for a number of typical occupations as to how the development of wages would have taken place if, beginning with a specified point of time, wages had been automatically adjusted to the cost of living. These computations were then compared with the actual development of wages. The comparison has revealed the fact that in the long run the curve of the actual wages and that of the hypothetical wages converge in most instances. This is surely due to the fact that at wage negotiations which have taken place in recent years the cost-of-living index has in an increasing measure been resorted to as a determining factor of wage rates;

ACTUAL WAGE AND SALARY RATES OF SPECIFIED OCCUPATIONS IN GERMANY COMPARED WITH HYPOTHETICAL RATES BASED ON COST OF LIVING, 1920–1921—Concluded

in other words, beginning with a certain point of time wage schedules have assumed a more or less sliding character. This applies particularly to building trades workers, whose district collective agreements provide wage boards which at fixed intervals have to determine whether a revision of wage scales seems justified. In addition to other wage determining factors the official cost-of-living index has played a great rôle in influencing the decisions of these wage boards.

The wage computations of the Ministry of Labor covered the occupations of printer, building-trades worker, miner, insurance employee, bank employee, and Government employee. The results of the computations for the first three and the last named of these occupations are given below in table form. The graphs which accompany the original article in the Reichs-Arbeitsblatt, and illustrate the above-mentioned fact even more strikingly than the table, can not be reproduced here owing to lack of space.

ACTUAL WAGE AND SALARY RATES OF SPECIFIED OCCUPATIONS IN GERMANY COMPARED WITH HYPOTHETICAL RATES BASED ON COST OF LIVING, 1920 AND 1921.

[1 mark at par=23.8 cents.]

Year and month.	Cost-of-living index, Berlin.	Printers (weekly wage).						Building trades workers (hourly wage).		
		Married journeyman over 24 years of age.			Single journeyman under 21 years of age.			Carpenters and masons.		
		Actual wage.		Wage based on cost of living (marks)	Actual wage.		Wage based on cost of living (marks)	Actual wage.		Wage based on cost of living (marks)
		Marks.	Index.		Marks.	Index.		Marks.	Index.	
1914	100	34.38	100	.....	31.25	100	.....	0.82	100	.....
1920:										
January	.....	160.50	467	.....	148.25	474	.....	3.52	429	.....
February	625	.....	.....	.....	.....	.....	.....	4.45	543	.....
March	777	.....	.....	214.88	.....	.....	195.31	.....	.....	5.13
April	881	.....	.....	267.13	.....	.....	242.81	5.70	695	6.37
May	853	210.50	612	302.89	198.25	634	275.31	6.50	793	7.22
June	815	235.50	685	293.26	223.25	714	266.56	.....	.....	6.99
July	894	250.50	729	280.20	238.25	762	254.69	6.80	829	6.68
August	794	.....	.....	307.36	.....	.....	279.38	.....	.....	7.33
September	791	.....	.....	272.98	.....	.....	248.13	.....	.....	6.51
October	870	.....	.....	271.95	.....	.....	247.19	.....	.....	6.49
November	871	270.50	787	299.12	248.25	796	271.88	.....	.....	7.13
December	930	.....	.....	299.46	.....	.....	272.19	.....	.....	7.14
1921:										
January	926	.....	.....	319.73	.....	.....	290.63	.....	.....	7.63
February	884	285.50	830	318.36	.....	.....	289.38	7.05	860	7.59
March	881	.....	.....	303.92	.....	.....	276.25	.....	.....	7.25
April	866	.....	.....	302.89	.....	.....	275.31	.....	.....	7.22
May	844	.....	.....	297.73	.....	.....	270.63	.....	.....	7.10
June	849	.....	.....	290.17	.....	.....	263.75	.....	.....	6.92
July	964	.....	.....	291.89	.....	.....	265.31	7.65	933	6.96
August	1,008	295.88	861	331.42	.....	.....	301.25	7.80	951	7.90
September	1,019	.....	.....	346.55	.....	.....	315.00	9.30	1,134	8.27
October	1,099	385.00	1,120	350.33	338.00	1,146	318.44	.....	.....	8.36
November	1,361	410.00	1,193	377.84	363.00	1,162	343.44	11.75	1,433	9.01
December	1,501	518.00	1,507	476.81	451.00	1,443	427.19	12.25	1,494	11.21

ACTUAL WAGE AND SALARY RATES OF SPECIFIED OCCUPATIONS IN GERMANY COMPARED WITH HYPOTHETICAL RATES BASED ON COST OF LIVING, 1920 AND 1921—Concluded.

Year and month.	Cost-of-living index.		Miners (daily earnings).			Federal and Prussian Government employees (annual salary).					
			Pick miners, Ruhr district.			Single employee, 21 years of age.			Married employee, with two children, 30 years of age.		
	Ruhr district.	Berlin.	Actual average earnings.		Wage based on cost of living (marks)	Actual salary.		Salary based on cost of living (marks)	Actual salary.		Salary based on cost of living (marks)
			Marks.	Index.		Marks.	Index.		Marks.	Index.	
1914	100	.....	6.48	100	.....	.....	.....	.....	.....	.....	.....
1920:											
January	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	690	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	785	100	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	883	113	46.75	721	50.87	7,500	100	7,500	15,000	100	15,000
May	932	110	47.33	730	57.22	.....	.....	8,475	.....	.....	16,950
June	904	105	49.03	757	60.39	.....	.....	8,250	.....	.....	16,500
July	903	115	49.50	764	58.58	.....	.....	7,875	.....	.....	15,750
August	827	102	54.45	840	58.51	.....	.....	8,625	.....	.....	17,250
September	822	102	54.85	846	53.59	.....	.....	7,650	.....	.....	15,300
October	887	112	57.15	882	53.27	8,250	110	7,650	16,200	108	15,300
November	937	112	57.73	891	57.48	.....	.....	8,400	.....	.....	16,800
December	969	120	57.65	890	60.72	.....	.....	8,400	.....	.....	16,800
1921:											
January	951	119	58.64	909	62.79	9,350	125	9,000	17,960	120	18,000
February	916	114	59.04	911	61.62	.....	.....	8,925	.....	.....	17,850
March	910	114	59.14	913	59.36	.....	.....	8,550	.....	.....	17,100
April	897	112	61.68	952	58.97	.....	.....	8,550	.....	.....	17,100
May	877	109	64.00	988	58.13	.....	.....	8,400	.....	.....	16,800
June	898	109	64.73	999	56.83	.....	.....	8,175	.....	.....	16,350
July	976	124	65.18	1,006	58.19	.....	.....	8,175	.....	.....	16,350
August	1,040	130	65.75	1,014	63.24	14,475	193	9,300	20,584	137	18,600
September	1,066	131	76.90	1,187	67.39	.....	.....	9,750	.....	.....	19,500
October	1,151	142	77.75	1,200	69.08	19,050	254	9,825	27,720	185	19,650
November	1,374	170	102.62	1,645	76.46	.....	.....	10,650	.....	.....	21,300
December	1,523	193	.....	.....	.....	.....	.....	12,750	.....	.....	25,500

In explanation of the preceding table it should be noted that in the case of all manual workers the last pre-war wage rate fixed by collective agreement and in the case of Government employees the salary paid in April, 1920, was taken as the basic wage or salary rate. In computing the hypothetical wage or salary rate the cost-of-living index for Berlin was used for all occupations except miners, the average cost-of-living index for the Ruhr district having been used in their case. The year 1914 is the base year used in the cost-of-living index for all occupations with the exception of Government employees, for which the index for March, 1920, was used as base.

The hypothetical wage based on the cost of living has in all instances been computed by using the cost-of-living index number of a given month as coefficient for the sliding of the wage during the subsequent month. To illustrate: In order to obtain the hypothetical wage of a married printer over 24 years of age, for February, 1921, the basic wage, i. e., the last wage rate fixed in 1914, in this case 34.38 marks, is multiplied by 926, the cost-of-living index for January, 1921, and the result divided by 100.

7. After several meetings, where points were vigorously discussed with utmost good feeling and courtesy, an agreement was adopted between the Presbrey-Leland Co.

LABOR AGREEMENTS, AWARDS, AND DECISIONS.

Granite Cutters—Barre, Vt.

THE Presbrey-Leland Co., at Barre, Vt., has concluded an agreement with the Granite Cutters' International Association, which is of especial interest in view of the unsettled conditions prevailing in the New England shops affiliated with the board of control of the granite industry. Until recently the Presbrey-Leland Co. had been a member of the Barre Manufacturers' and Producers' Association, but resigned when it became evident that no agreement could be reached between the association and the union.

Events leading up to the present situation in the industry and to the conclusion of a separate agreement by this company are thus described by the company:

1. An agreement was made between the Manufacturers' and Producers' Association and the G. C. I. A. on February 27, 1919, during President Duncan's absence in Europe. Upon his return in April, 1919, Mr. Duncan expressed gratification and congratulations upon the result of the conference.

2. A few months after the signing of this agreement the tremendous and rapid rise of living costs began, due as we all know to high wages, waste, enormous overhead expense, and a certain amount of profiteering. Skilled laborers in other trades had been advanced to anywhere from $8 to $14 per day, so that in response to demands from all branches President Duncan began agitating for an $8 wage. In December he called for a conference with the special labor committee of the Manufacturers' and Producers' Association to take up the question of wage increase from April 1, 1920, all in accordance with terms of agreement. Committees met and accomplished nothing.

3. In January, 1920, the Manufacturers' and Producers' Association held a conference in Montreal and then appointed a committee to meet with the G. C. I. A. officials. This committee did nothing until the last week in March; then as a final concession offered $6.60 per day until July 1, $7.20 to September 1, and $8 thereafter—and this after much debate and objection. President Duncan signed, subject of course, to ratification by local branches, and wired branches to continue work pending presentation of new proposal. Branches learned of terms by 'phone and refused to continue working, thus going out on strike April 1, 1920. They maintained that abundant time had been given to arrive at a fair settlement by April 1; business was admittedly fine, profits large, and they could not live longer on the wage being paid. This was the actual situation, and on June 14 the manufacturers granted the $8 minimum. Had this been done months before without caviling and with acknowledgment of abnormal and unforeseen conditions, at the same time obtaining an agreement for a reduction in wages (corresponding with that of other trades) upon the return of normal living costs, there would doubtless have been no labor war with its great losses to all.

4. Messrs. Presbrey attended nearly all conferences of the Manufacturers' and Producers' Association and C. H. Presbrey was appointed a member of a committee to draft recommendations at the conference in Boston, December 27 and 28, 1921. This committee recommended that the association abide by the present agreement until its expiration on April 1. By a vote of 41 to 22 this recommendation was rejected by the conference. It was thereupon voted by the conference to put into effect on January 2, 1922, the proposals substantially as made to the G. C. I. A. on November 21, 1921.

5. Believing that little could be accomplished to save the industry with the existing attitude between the union and the manufacturers, and not being at liberty to act independently with honor while still a member of the Granite Manufacturers' and Producers' Association, the Presbrey-Leland Co. resigned.

6. Being acquainted with the union men and officials and knowing they stood ready to make many concessions if fairly met, the Presbrey-Leland Co. accepted an invitation to write such an agreement as they believed fair to the men and employers. They met the union committees in conference.

7. After several meetings, where points were vigorously discussed with utmost good feeling and courtesy, an agreement was adopted between the Presbrey-Leland Co. and the G. C. I. A. This agreement has been favorably passed upon by the international executive committee.

8. The agreement is for three years and grants practically all that the Manufacturers' and Producers' Association has been striving for years to obtain without avail. The wage was left at $1 per hour minimum, but with an arrangement for increase or decrease in accordance with economic conditions, which is the only equitable and permanent adjustment possible.

The agreement originally written by the company and accepted with a few minor changes obtains for this company, the company states, "practically every vital point demanded by the manufacturers' association, up to the present time without result"—except the revision of the wage scale, which this company does not find necessary.

The contract, which is made for three years, retains the minimum wage of $1 an hour for journeymen, and provides for an increase or decrease each year in the event of an appreciable increase or reduction in living costs and a corresponding change in the wage schedules by other trades.

Adjustment of grievances is provided for through an adjustment committee of 6 members, their differences to be appealed to an enlarged arbitration board of 7 members, whose decision shall be final.

One of the unique features of the agreement is the provision in article 6 for a health committee of 6 members whose duty it is to investigate, to assist in the development, the perfecting, and the introduction of dust-removing devices, to consider insurance against sickness, and to improve in every possible way general working conditions. Funds for the development and experimental work of this committee are provided by both employer and workers.

The agreement follows in full:

GRANITE CUTTERS' AGREEMENT.

It is mutually agreed by the undersigned, the Presbrey-Leland Co. and the Barre Branch of the Granite Cutters International Association, that the following conditions shall exist and are hereby agreed to by both parties:

Article I.

This agreement to continue in force from April 1st, 1922, to April 1st, 1925, and should either party desire to change at expiration of this agreement, three months' notice shall be given prior to April 1st of each year thereafter and changes specified when notice is given. If no notice is given by either party as above stated, then this agreement shall continue from year to year from April 1st, 1925.

Article II.

Eight hours shall constitute a day's work five days per week, with four hours on a Saturday from April 1st to November 1st, with Saturday a full holiday from November 1st to April 1st. Working hours to be from eight (8) to twelve (12) noon and from one (1) p. m. to five (5) p. m., excepting Saturday, which shall be from eight (8) a. m. to twelve (12) noon. Above schedule of working hours may be changed for seasonal and other reasons by mutual agreement.

Article III.

SECTION 1. Except as otherwise specified, the minimum rate of wages shall be one dollar ($1.00) per hour for journeymen granite cutters.

SEC. 2. In the event of an appreciable increase or reduction in living costs and a corresponding change in the wage schedules by other trades, the minimum wage will be increased or decreased as economic conditions make necessary. This wage question to be adjusted in accordance with the provisions laid down in Article XX of this agreement.

Article VII.

SECTION 1. In turning down grindstones, water in sufficient quantities

Provided any alteration of the above wage schedule is contemplated by either party to this agreement, a three months' notice will be required. If economic conditions demand a readjustment of the wage schedule, it is agreed that such readjustment shall be made not oftener than once each year dating from April 1st, 1922.

SEC. 3. All work done outside of these hours shall be paid one and one-half (1½) times, and overtime is not to be worked unless in case of emergency, such as from the spoiling or breaking of a stone; delay in quarrying large sizes, where an accident has happened, or because of stringent contract conditions, and then only the overtime rate applies.

SEC. 4. In the event of necessity for overtime, the employer shall make a prior report to the adjustment committee, giving reason; they to decide the justice of the request. All work done on Sundays or holidays to be paid for double.

Article IV.

SECTION 1. Wages must be paid in cash and in full weekly and within four days (4) of the time they become due and to be paid during working hours and not more than four (4) days to be retained. It is expected that employers having once established a pay day shall give notice if unable to pay on the regular pay day, stating the day payment may be expected, which in every case must be within the stated time. In the event of failure to pay within the stated time, an investigation shall be made on the evening of the fourth day by the adjustment committee of both bodies and advice given before starting time the following morning.

SEC. 2. A workman having once accepted pay, his rate will be established and can only be changed by mutual consent between the employee and the employer. The rate in no case to be below the established minimum rate.

Article V.

SECTION 1. Members who may be incapacitated, through old age or physical disability, from doing a day's work under the provision of this agreement may bring their condition to the notice of their branch; and such branch shall have the right to make such provision as in its opinion seems necessary for the protection of such members.

SEC. 2. If the employer is proven guilty of paying less than the minimum wage to any journeyman granite cutter except as otherwise provided for in this article, said employer shall be required to pay the amount of wages withheld from such employee to the local branch G. C. I. A. within 15 days.

Article VI.

SECTION 1. All dust-creating machines must be adequately equipped with dust-removing devices when proven practical, the practicability of such devices to be passed upon in accordance with provisions laid down in Article XX of this agreement.

SEC. 2. Within one month from the signing of this agreement a body of six members, to be known as the "health committee," shall be created. Of the committee three members shall be appointed by the employer and three by the local branch G. C. I. A. It shall be the duty of this committee to investigate, to assist in the development, the perfecting, and the introduction of dust-removing devices; to consider insurance against sickness and improve in every possible way general working conditions.

SEC. 3. Funds for the development and experimental work of this committee shall be provided in the following manner: One-half of 1 per cent to be deducted weekly from the wage of each member of the local branch G. C. I. A. The employer to set aside each week an amount equal to the total sum derived from the above source. This fund shall be placed in the hands of a treasurer elected by a majority of the health committee. Should the funds thus provided be either inadequate or more than sufficient for the desired purpose, any necessary modification may be made by mutual agreement.

SEC. 4. The health committee shall make a written progress and financial report on or about April 1st and October 1st of each year to the employer and the local branch G. C. I. A.

SEC. 5. Should the members of the health committee be unable to agree, any subject in controversy shall be submitted to the adjustment committee in accordance with Article XX of this agreement.

Article XIII.

Article VII.

SECTION 1. In turning down grindstones, water in sufficient quantities or other suitable devices must be used at all times to keep down the dust.

SEC. 2. Closets connected with running water must be furnished in every shed and must always be kept in sanitary condition, thoroughly boxed in, and ventilated so as to eliminate all odors from said closet.

SEC. 3. Drinking water with sanitary bubblers must be furnished in every shed.

SEC. 4. In sheds where overhead derricks are used, lumpers and derrickmen are to be furnished with whistle or bell to give warning when stones are being carried along shed. Manufacturers are to see that this is enforced.

Article VIII.

SECTION 1. No surface cutting machine to be operated in cutting shed. Such machines shall immediately cease operation when a breakdown in the air suction or other device occurs, or when such air suction or other device becomes defective. That workmen shall be protected from grit from said machines, proper screens or butty boards must be furnished, and no cutter shall be bankered within twenty (20) feet from head of machine. Workmen must be at all times amply protected from said machines.

SEC. 2. Bumpers must not be used. Any machine that can not be used in the ordinary way for cutting letters or for cleaning or chiseling edges is to be classed as a bumper and must not be used.

SEC. 3. It is agreed that the employer shall have the privilege of operating two 7-hour shifts on all granite-working machinery. The employees shall receive eight (8) hours' pay for the above-mentioned seven hours' work. When operating such machinery on regular time the employer shall have the privilege of running overtime as provided in Article III, section 3. It is agreed that where a manufacturer operates two shifts, such work produced shall be sold to concerns which are considered by the adjustment committee to be in no way a detriment to the business.

SEC. 4. It is agreed that the manufacturers will use all legitimate and fair means to discourage the sale of finished and partially finished granite to such firms as are known to be employing nonunion labor and paying less than the union rate, with the resultant inferior workmanship, unfair competition with the progressive and humane retail dealer, and the lowering of a proper standard of living for skilled granite workers.

SEC. 5. The operator on all surfacing and sand blasting machines, turning lathes, carborundum and dental saws shall be a member of the G. C. I. A.

SEC. 6. Except as otherwise specified, the operator of all machines now in use or which may be introduced for cutting granite shall be confined exclusively to granite cutters who have served their apprenticeship.

SEC. 7. When a journeyman lathe man can not be found, a journeyman granite cutter can be used on the lathe until such time as a satisfactory journeyman lathe man can be procured.

Article IX.

Cutting sheds and air for pneumatic machines are to be heated from October 15 to April 15 of each year to at least forty (40) degrees. Hot water also is to be provided during that period.

Article X.

A workman must report any accident or defect in his stone immediately on discovery, otherwise he shall be held responsible for any extra expense in altering said stone. Sufficient room at all times must be given cutters' work. Screens or butty boards must be furnished at all times.

Article XI.

Awnings shall be furnished for all outdoor work.

Article XII.

All channeling of granite for crosses or any similar work, building or monumental, after the stone has been bankered for the cutter, whether in the shed or in the quarry, is granite cutters' work.

Article XX.

SECTION 1. It is mutually agreed that any grievance or contention that may arise during the existence of this agreement as to its performance in good faith by

Article XIII.

Before suspending operations for the observance of any and all holidays, employers must post notices in the shed at least twenty-four (24) hours before shutting down, stating what time work is expected to be resumed.

Article XIV.

Any workman discharged shall receive his pay immediately. Any workman leaving shall notify his employer, and having complied with the agreement, shall receive his pay in cash or check payable upon demand. Failing to comply, he shall be held responsible for his sharpening at the rate of thirty (30) cents per day from the time he leaves the job until the agreement has been complied with. No workman is to be discharged before or during the first two working hours of the day, except in case of a cutter spoiling or finishing a stone.

Article XV.

Any national, State, or municipal law enacted for the betterment of wages or conditions in the granite trade shall not be violated.

Article XVI.

The officials and adjustment committee of Barre Branch are to be allowed in the sheds any time during working hours on union business, after notifying the office or foreman.

Article XVII.

It is understood that a party or firm to be a recognized contractor or manufacturer, must own their blocks and tools, rent their own shed room, and pay for their own tool sharpening; they must make a monument complete with the exception of extremely large stones, statuary, turned work, or sawed work.

Article XVIII.

The employer agrees to waive all jurisdiction over members holding contribution cards in the G. C. I. A. until such times as the I. E. C. and said employer agree upon rules and regulations to take the place of this agreement as to jurisdiction.

Article XIX.

SECTION 1. All apprentices shall be required to serve a term of three years. Three months' trial shall be given, after which an agreement shall be signed by apprentice and employer, which shall be binding on both parties. Should any contention arise between an apprentice and his employer it shall be left to a committee as provided for in Article XX of this agreement.

SEC. 2. This committee only shall have the power to annul said agreement, should they decide it is for the best interest of the parties concerned to do so, and shall grant clearance lines signed by the representatives of both committees, where their decision makes clearance lines necessary. The number of apprentices employed by each firm shall not exceed one apprentice to every four (4) journeymen employed, except where an employer wishes to place his son as an apprentice, but in such cases no other apprentice can be put to work until eight (8) journeymen can be employed.

SEC. 3. The apprentice is to be kept cutting granite continuously from the time of commencement; provided that should he desire to operate any machine used in cutting or sawing granite, he may learn to operate said machine during the last three months of the last year of his time.

SEC. 4. Manufacturers shall keep a record of all apprentices in their employ; such records shall state the date when apprentice leaves, with or without clearance lines, obtained by either mutual consent or in accordance with the provisions of section 2 of this article. Any manufacturer hiring an apprentice who may have already served part of his apprenticeship elsewhere shall demand and receive a record of such time served. All such records must be kept on file; also the time such apprentice may have been employed by him. All of which records must be open to inspection by the shop steward or adjustment committee of either association.

Printing—Chicago.

Article XX.

SECTION 1. It is mutually agreed that any grievance or contention that may arise during the existence of this agreement as to its performance in good faith by either party shall be referred to a committee of six (6) members; three to be selected by the employer and three from the local branch of G. C. I. A.; which committee shall act as an adjustment committee and said committee failing within five (5) days to agree by two-thirds vote, shall refer the matter in dispute to an arbitration board of seven (7), two (2) to be selected by the employer and two (2) by G. C. I. A. In each instance the two (2) thus appointed shall select one (1) additional member to serve and these two (2) members thus selected shall choose the last or seventh member. The last three named shall be men of high standing, in no way connected with the granite industry. The arbitration committee thus constituted shall hear the parties and make an award within fifteen (15) days by majority vote. Pending such arbitration in reference to the foregoing agreement, it is mutually agreed that there shall be no strike, lockout, or suspension of work.

SEC. 2. It is further agreed that any grievance or contention that may arise during the existence of this agreement that is not covered by this agreement shall be referred to the adjustment committee, who shall render their decision within five (5) days; and any agreement that they may come to in the matter under consideration shall be accepted by both parties. If the adjustment committee fails to agree the matter shall then be referred to the arbitration committee provided for in section 1 of this article. Pending consideration by this adjustment committee, it is mutually agreed that the cause of contention be not removed the first five (5) days but said contention shall be removed pending consideration by the arbitration committee; and it is further agreed that pending the consideration of any contention by said adjustment and arbitration committees there shall be no strike, lockout, or suspension of work. The award of arbitration committee shall be final.

With respect to the efficiency of its employees this company says:

We noted a lowering in efficiency during and just after the war, but by no means to the extent of 40 or 50 per cent, as reported by many manufacturers. About 9 months ago and after careful consideration we decided to try out a 15-minute rest period twice a day. Knowing what a recess does for school children and that a 5-hour period of unremitting honest and hard labor must necessarily result in a slackening of application and pep, we were willing to grant the request of the men, only stipulating that the daily production must not fall below the standard. We have found that the output has been increased, the men have increased in weight, improved in health, and are much happier at their work. At the end of the day they are not as tired, hence, the agitation and request for a 7-hour day with a corresponding decrease in wages has been forgotten. The Presbrey-Leland Co. found the year 1921 the best and most profitable of its career and its overhead expense at Barre was reduced over 25 per cent, with a corresponding saving of many thousands of dollars in estimated costs.

Molders.

THE annual conference of the International Molders' Union of North America and the Stove Founders' National Defense Association which met last December, resulted in an agreement fixing compensation and working conditions for stove molders for the year 1922. The agreement provides for the same minimum rate for day workers as prevailed last year, namely, $6; for a 10 per cent reduction on all piecework and an additional 5 per cent reduction on the board prices of certain specified large pieces of furnace, steam, and hot-water work. Other provisions of the conference agreements, some of which have been in effect since 1891, remain the same.

ranging from 80 per cent to 84 per cent had been in effect for approximately two and one-half years, these ratios having been agreed to on four different occasions by both parties, the board decided

Printing—Chicago.

A NEW wage scale for the Chicago press feeders is established by the decision of the board of arbitration created to settle the controversy between about 2,100 press feeders and assistants, members of the Franklin Union No. 4, and their employers in the Franklin Association of Chicago. Wages of press feeders are reduced $3 a week by this decision, from $39.65 to $36.65 per week. The new scale is effective March 27, 1922, and for a period of one year thereafter. Dean Ralph E. Heilman of the school of commerce, Northwestern University, acted as chairman of the arbitration board.

The employers in the case requested a substantial reduction in wages. They requested a decrease of 23 per cent, or $9.50, because of the decreased cost of living. They maintained that the 1914 differential between the pressmen and feeders should be restored, which would entitle them to a reduction of 22 per cent. They urged that increased labor and operating costs resulting from the change from the 48-hour to the 44-hour week entitled them to a reduction of 18.6 per cent, or $7.37 per week.

The union requested an increase of $5 a week, basing their argument upon the necessity for maintaining the American standard of living and upon the desirability of a 10 per cent differential between pressmen and feeders.

In arriving at its decision the arbitration board gave consideration to all the arguments presented, basing its decision largely upon wage differentials, the economic condition of the industry, and the cost of living. The reduction asked for by the employers because of decreased cost of living the board felt to be too large, in view of the fact that the recent reductions already taken by the other unions engaged in the printing industry in Chicago and elsewhere were substantially less than the percentage indicated. The budget argument of the union the board does not entirely condemn.

It believes that this theory sets forth a splendid ideal for industry to achieve, in due time. But the simple fact is that according to the most reliable estimates, the total annual income produced in the United States, at the present time, is nowhere nearly large enough to provide such a wage for every adult male wage earner. There is no indication that the printing industry is more profitable than industry in the United States, as a whole. Therefore, it seems to us that it would be unjustified and unfair to select the printing industry as the basis of experimentation, by the establishment of such a scale of wages. If wages were to be established on this basis for the members of Franklin Union No. 4, the same basis in fairness would necessarily have to be applied to all other employees of the printing industry in Chicago.

Wages can be paid only from the income produced. It seems clear that, under existing conditions, the printing industry in Chicago simply could not afford to pay any such wage to all adult male wage earners. Therefore, it is impossible to arrive at a wage based upon this argument.

With respect to the arguments relative to the proper differential between pressmen and feeders, the board considered the decrease of 22 per cent requested by the employers unjustifiably large and the 10 per cent differential asked by the union too small, in view of the experience, skill, responsibility, etc., required by the members of the two crafts. This differential in 1914 was 30 per cent, that is, the wages of pressmen's assistants or feeders was 70 per cent of that paid to the pressmen. In the four wage adjustments prior to this one the ratios ranged from 80.9 to 84.6. In view of the fact that ratios

ranging from 80 per cent to 84 per cent had been in effect for approximately two and one-half years, these ratios having been agreed to on four different occasions by both parties, the board decided that the existing ratio should not be modified materially unless adequate cause for such modification were shown. Such cause in the opinion of the board was not shown.

With respect to the employers' request for a decrease of 18.6 per cent based on the increase in labor and operating costs due to the operation of the 44-hour week, "the board feels that it is not incumbent upon it to arrive at a decision which would place labor hour costs on precisely the same basis as prevailed under the 48-hour week. The 48-hour week versus the 44-hour week is not an issue in this case. The 44-hour week was introduced in Chicago, by mutual agreement, last May. When introduced, there was no assurance or guaranty that it would not increase labor costs and operating costs to the employer. Further, if this cut were granted, the effect would be to impose the entire burden of increased labor costs of the 44-[hour] week upon the employees. To this the board can not acquiesce."

The advance of $5 per week requested by the union the board felt unwarranted in view of the fact that such an increase would result in a wage for feeders in excess of that paid to their immediate superiors, the pressmen. Neither would the economic condition of the industry warrant such increase, in the opinion of the board.

Railroads.

THE Delaware, Lackawanna & Western Railroad Co. reached an agreement on February 23 with representatives of the engineers, firemen, hostlers, and hostler helpers employed by that carrier, by which it is agreed that rules and rates of pay for these classes of workers in effect on February 23, 1922, are to remain in effect until April 1, 1923. These rates will remain in effect after April 1, 1923, unless and until they are terminated or changed by 30 days' written notice by either party, except that "if the conference committee of managers, eastern railroads, shall reach an agreement with representatives of employees, or failing such agreement the Labor Board or any other duly authorized tribunal, body, or committee shall render a decision, changing the rules in effect on February 23, 1922, governing payment for overtime of engineers, firemen, hostlers, or hostler helpers in freight or yard service on Class I railroads, such agreement or decision, in so far as it relates to payment for overtime, shall be made effective on the railroad of the Delaware, Lackawanna & Western Railroad Co., whether applicable specifically to its road or not, and the Delaware, Lackawanna & Western Railroad Co. shall be entitled to and receive all the benefits and advantages thereof."

EMPLOYMENT AND UNEMPLOYMENT.

Shoe Industry—Brockton, Mass.

THE State board of conciliation and arbitration has in its recent decision on the Brockton shoe cases awarded a 10 per cent reduction in the skiving, making, treeing, vamping, dressing, and packing departments. In the cutting, stitching, heeling, sole leather and finishing departments, a 10 per cent reduction was awarded with certain limitations, the principal exceptions being that in the case of day work when the compensation is at the rate of $11 per week or less, there is to be no change; and that the 10 per cent reduction in no instance is to make the rate of wages less than $11 per week.

In nine other factories outside of Brockton the 10 per cent reduction was awarded, with the same limitation as to day wages. Approximately 20,000 workers in Brockton and the South Shore district are affected by the award. The cases which have been pending before the State board for several months were brought under the arbitration agreement between the Brockton Shoe Manufacturers' Association and the Boot and Shoe Workers' Union after the employers had requested a reduction of 20 per cent. This represents the first general cut in wages in the shoe centers of the State.

increase appearing is 28.5 per cent, which occurred in the cotton

EMPLOYMENT AND UNEMPLOYMENT.

Employment in Selected Industries in March, 1922.

THE Bureau of Labor Statistics received and tabulated reports concerning the volume of employment in March, 1922, from representative establishments in 12 manufacturing industries and in bituminous coal mining.

Because of incomplete returns up to the time of going to press the woolen industry is omitted.

Comparing the figures of March, 1922, with those for identical establishments for March, 1921, it appears that in 9 of the 13 industries there were increases in the number of persons employed, while in 4 industries there were decreases. The largest increase, 43.4 per cent, appears in the hosiery and underwear industry. The boot and shoe industry shows an increase of 22.3 per cent and automobile manufacturing an increase of 20.8 per cent. The greatest decrease, 26 per cent, is shown for cotton manufacturing. Decreases of 10.2 per cent and 8.5 per cent appear in iron and steel and in paper making, respectively.

Five of the 13 industries show increases in the total amount of pay roll for March, 1922, as compared with March, 1921. The remaining eight industries show decreases in the amount of pay roll. The hosiery and underwear industry shows the most important increase—48.3 per cent, while in automobile manufacturing there was an increase of 29.8 per cent. In the iron and steel industry the greatest decrease occurred—34.7 per cent. Cotton manufacturing shows a decrease of 32.6 per cent.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN MARCH, 1921 AND 1922.

Industry.	Establishments reporting for March, 1921 and 1922.	Period of pay roll.	Number on pay roll.		Per cent of increase (+) or decrease (−).	Amount of pay roll.		Per cent of increase (+) or decrease (−).
			March, 1921.	March, 1922.		March, 1921.	March, 1922.	
Iron and steel	113	½ month.	134,421	120,663	−10.2	$8,185,422	$5,341,971	−34.7
Automobile manufacturing	50	1 week.	80,679	97,493	+20.8	2,126,182	2,758,907	+29.8
Car building and repairing	62	½ month.	55,587	57,007	+2.6	3,750,721	3,301,886	−12.0
Cotton manufacturing	61	1 week.	58,590	43,366	−26.0	1,010,521	681,278	−32.6
Cotton finishing	17	1 week.	11,905	12,441	+4.5	263,292	246,008	−6.6
Hosiery and underwear	64	1 week.	23,121	33,153	+43.4	381,316	565,365	+48.3
Silk	45	2 weeks.	17,179	17,935	+4.4	783,672	717,023	−8.5
Men's ready-made clothing	45	1 week.	26,195	31,353	+19.7	852,185	841,660	−1.2
Leather manufacturing	36	1 week.	11,343	13,149	+15.9	248,028	277,724	+12.0
Boots and shoes	83	1 week.	55,424	67,780	+22.3	1,345,486	1,464,671	+8.9
Paper making	58	1 week.	28,116	25,732	−8.5	697,901	602,922	−13.6
Cigar manufacturing	52	1 week.	15,163	15,225	+.4	291,517	264,696	−9.2
Coal mining (bituminous)	90	½ month.	24,368	24,221	−.6	1,507,716	1,778,657	+18.0

Comparative data for March, 1922, and February, 1922, appear in the following table. The figures show that in six industries there were increases in the number of persons on the pay roll in March as compared with February, and in seven, decreases. Car building and repairing shows an increase of 4.6 per cent, and the men's ready-made clothing industry an increase of 3.4 per cent. The greatest

worked were reported for this industry and the per capita earnings showed an increase of 4.3 per cent when March figures were compared with those for February.

decrease appearing is 28.5 per cent, which occurred in the cotton manufacturing industry.

When comparing March, 1922, with February, 1922, eight industries show increases in the amount of money paid to employees and five show decreases. An increase of 7.3 per cent is shown in automobile manufacturing, while one of 6.7 per cent appears in both the iron and steel industry and cigar manufacturing. Cotton manufacturing shows a decrease of 33 per cent.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN FEBRUARY AND MARCH, 1922.

Industry.	Establishments reporting for February and March, 1922.	Period of pay roll.	Number on pay roll.		Per cent of increase (+) or decrease (−).	Amount of pay roll.		Per cent of increase (+) or decrease (−).
			February, 1922.	March, 1922.		February, 1922.	March, 1922.	
Iron and steel	109	½ month.	117,193	119,914	+2.3	$4,981,029	$5,313,992	+6.7
Automobile manufacturing	49	1 week.	94,196	96,269	+2.2	2,538,006	2,722,175	+7.3
Car building and repairing	62	½ month.	54,504	57,007	+4.6	3,183,436	3,301,886	+3.7
Cotton manufacturing	59	1 week.	59,905	42,828	−28.5	1,007,793	674,927	−33.0
Cotton finishing	17	1 week.	12,164	12,441	+2.3	234,596	246,008	+4.9
Hosiery and underwear	65	1 week.	33,321	33,238	−.2	557,297	566,057	+1.6
Silk	44	2 weeks.	17,817	17,783	−.2	747,648	710,055	−5.0
Men's ready-made clothing	48	1 week.	30,509	31,545	+3.4	840,913	853,607	+1.5
Leather manufacturing	36	1 week.	13,644	13,149	−3.6	298,824	277,724	−7.1
Boots and shoes	82	1 week.	68,999	67,144	−2.7	1,558,928	1,459,893	−6.4
Paper making	57	1 week.	24,957	24,832	−.5	592,893	582,973	−1.7
Cigar manufacturing	56	1 week.	15,506	15,837	+2.1	258,450	275,667	+6.7
Coal mining (bituminous)	85	½ month.	23,604	23,085	−2.2	1,651,563	1,682,262	+1.9

In addition to the data presented in the above tables as to the number of employees on the pay roll, 88 establishments in the iron and steel industry reported 97,533 employees as actually working on the last full day of the pay period in March, 1922, as against 101,021 for the reported pay-roll period in March, 1921, a decrease of 3.5 per cent. Figures given for 80 plants in the iron and steel industry show that 95,205 employees were actually working on the last full day of the pay period reported for March, 1922, as against 90,467 employees for the period in February, 1922, an increase of 5.2 per cent.

Changes in Wage Rates and Per Capita Earnings.

DURING the period February 15 to March 15, 1922, there were wage changes made by some of the establishments in 10 of the 13 industries.

Iron and steel.—All employees in one mill were reduced 26 per cent in wages. In another mill 50 per cent of the force were cut 10 per cent, while the remainder of the force were cut 2 per cent. Four establishments reported a wage rate decrease of 10 per cent, affecting all men in the first two plants, 95 per cent of the men in the third plant and 40 per cent of the men in the fourth plant. Wage decreases ranging from 5 to 10 per cent were made to practically all employees in one concern. A 5 per cent decrease was made in the wages of about 20 per cent of the force in one plant. In five plants, a 2 per cent wage reduction was reported, affecting 50 per cent of the force in one plant, 40 per cent of the force in two plants and approximately 30 per cent of the force in two plants. One-fourth of the employees in another mill were cut 1 per cent in wages. Increased production and more time

worked were reported for this industry and the per capita earnings showed an increase of 4.3 per cent when March figures were compared with those for February.

Automobile manufacturing.—An approximate decrease of 11 per cent in wage rates, affecting 95 per cent of the force, was reported by one establishment. Production increased during this period and the per capita earnings for March, when compared with those for February, showed an increase of 5 per cent.

Car building and repairing.—Comparing the per capita earnings for March with those for February, a decrease of 0.8 per cent is noted.

Cotton manufacturing.—The wages of all employees in three establishments were reduced, two plants being cut 10 per cent and one plant 20 per cent. Owing to the industrial dispute in some sections of the country, the volume of employment in this industry showed a decrease and the per capita earnings were 6.3 per cent less for March than for February.

Cotton finishing.—No changes in wage rates were reported for this period. The per capita earnings showed an increase of 2.5 per cent when February and March figures were compared.

Hosiery and underwear.—A 5 per cent bonus was granted to 65 per cent of the employees in one mill. When the per capita earnings for March were compared with those for February, an increase of 1.8 per cent was found.

Woolen.—The wages of all employees in one mill were reduced 20 per cent. The per capita earnings for March when compared with those for February, showed an increase of 3.2 per cent.

Silk.—Part-time employment during this pay-roll period resulted in a decrease of 4.8 per cent in per capita earnings as compared with those for last month.

Men's ready-made clothing.—All employees in one establishment were reduced 10 per cent in wages. A decrease of 1.8 per cent in per capita earnings was indicated when February and March pay rolls were compared.

Leather manufacturing.—A wage rate decrease of 20 per cent was made to 90 per cent of the employees in one tannery. Ninety-five per cent of the force in one concern were cut 13 per cent in wages, while 34 per cent of the force in another concern had a wage rate reduction of 12 per cent. The per capita earnings for March were 3.6 per cent less than for February.

Boots and shoes.—Six factories reported a wage rate decrease of 10 per cent, affecting practically the entire forces of three factories, 80 per cent of the forces of two factories, and 29 per cent of the force in one factory. A decrease of 3.8 per cent in per capita earnings was shown when comparing March figures with those for February. Business was reported slack as the establishments were finishing up the end of the season's work.

Paper making.—A 19 per cent decrease in wage rates was made by one mill. Two concerns reported a 10 per cent cut in wages, affecting 90 per cent of the force in one concern. The number affected in the other concern was not stated. When comparing per capita earnings for March with those for February, a decrease of 1.2 per cent appears.

Cigar manufacturing.—A decrease of 14 per cent in wage rates, affecting 55 per cent of the employees, was reported by one establishment. Two-thirds of the employees in two factories had decreases of

The number of females under the various groups show that there was actually a considerable reduction in the number engaged in agriculture and in domestic and personal service, while the

10 per cent and 5¾ per cent respectively. In another plant, one-half of the force were cut 8 per cent in wages. An increase in per capita earnings of 4.4 per cent was shown when February and March figures were compared.

Bituminous coal mining.—Two mines made wage rate reductions of 30 per cent to all employees, while in the third mine the entire force was cut 35 per cent. The monthly men in another mine were reduced 10 per cent in wages. When comparing the per capita earnings for March with those for February, an increase of 4.1 per cent was noted.

Estimated Number of Wage Earners in the United States.

THE Bureau of Labor Statistics receives frequent requests for the number of "wage earners" in the United States, and in order to arrive at an estimate of this number the following statement has been prepared, based on figures recently released by the Bureau of the Census. According to these figures 33,059,793 males and 8,549,399 females, a total of 41,609,192 persons 10 years of age and over were, as reported by the census enumerators in 1920, gainfully occupied. This represents one-half of the total population of those ages.

In order to arrive at the approximate number of wage earners among the gainfully occupied, as distinguished from working proprietors and salaried employees, the bureau has made use of the figures prepared by Alba M. Edwards, Ph. D., of the Bureau of the Census, in an article entitled "Social-economic groups of the United States," which he published in the June, 1917, edition of the Quarterly Publication of the American Statistical Association. In this article Dr. Edwards made a rearrangement of the occupations and occupation groups of Table 1 of the Thirteenth Census report on occupations. As a like table for the Fourteenth Census has not yet been published, the tables here given were prepared on the assumption that males and females in 1920 were distributed among the various occupation groups on the same percentage basis as in Dr. Edwards's arrangement of the 1910 figures.

Therefore, while the total number of males and of females in each general group in 1920 is accurate according to the census statement, the distribution into the several classes as herein shown is an estimate only. It is assumed, however, that the totals of the two main groups—"proprietors and salaried employees" and "wage earners"—are fairly accurate, and that nearly 25,000,000, or approximately 60 per cent of the persons 10 years of age and over who were gainfully occupied, may be classed as "wage earners."

According to the census advance figures, the proportion of gainfully occupied females to males had decreased 0.7 of 1 per cent in 1920 as compared with 1910. In 5 of the 9 general occupation groups the decreased proportions were: Agriculture, 4.4 per cent; domestic and personal service, 2.9 per cent; manufacturing and mechanical industries, 2 per cent; extraction of minerals, 0.8 of 1 per cent; and public service, 0.1 of 1 per cent. In the 4 remaining groups the increased proportions were: Clerical occupations, 11.4 per cent; professional service, 3.1 per cent; transportation, 3 per cent; and trade, 2.9 per cent.

TOTAL PERSONS 10 YEARS OF AGE AND OVER ENGAGED IN GAINFUL OCCUPATIONS, DISTRIBUTED BY SEX AND CLASSES OF OCCUPATIONS, 1920—Concluded

The number of females under the various groups show that there was actually a considerable reduction in the number engaged in agriculture and in domestic and personal service, while the increases had been greatest in clerical occupations, professional service, and manufacturing and mechanical industries in the order named.

Among males in 1920 there had also been reductions in the actual number engaged in agriculture of 1,000,000 and of those in domestic and personal service of 25,000. The greatest increase was that of 2,044,000 in manufacturing and mechanical industries.

The decreases in the number of males and females engaged in agriculture were in a measure due to a change in the date of the enumeration from April 15 in 1910 to January 1 in 1920.

The total number of gainfully employed males 10 years of age and over in 1920 was approximately 3,000,000, or 9.9 per cent, greater than in 1910, as compared with an increase of 474,000, or 5.9 per cent, in the number of females. The total male and female population 10 years of age and over increased 14.2 per cent and 17.1 per cent, respectively, in the same period.

TOTAL PERSONS 10 YEARS OF AGE AND OVER ENGAGED IN GAINFUL OCCUPATIONS, DISTRIBUTED BY SEX AND CLASSES OF OCCUPATIONS, 1920.

Occupation.	Males.	Females.	Total.	
			Number.	Per cent.
Agriculture, forestry, and animal husbandry:				
Proprietors, officials, and managers	5,338,047	163,695	5,501,742	50.2
Laborers	4,528,953	920,379	5,449,332	49.8
Total	9,867,000	1,084,074	10,951,074	100.0
Extraction of minerals:				
Proprietors, officials, and managers	28,271	339	28,610	2.6
Semiskilled workers	507,796	1,245	509,041	46.7
Laborers	551,290	1,913	553,203	50.7
Total	1,087,357	3,497	1,090,854	100.0
Manufacturing and mechanical industries:				
Proprietors, officials, and managers	652,898	7,724	660,622	5.2
Skilled workers	4,613,814	75,312	4,689,126	36.6
Semiskilled workers	2,491,895	1,755,337	4,247,232	33.1
Laborers	3,123,030	92,691	3,215,721	25.1
Total	10,881,637	1,931,064	12,812,701	100.0
Transportation:				
Proprietors, officials, and managers	202,495	3,857	206,352	6.7
Clerks and kindred workers	256,684	198,621	455,305	14.8
Skilled workers	225,311	214	225,525	7.4
Semiskilled workers	644,562	3,857	648,419	21.2
Laborers	1,522,991	7,713	1,530,704	49.9
Total	2,852,043	214,262	3,066,305	100.0
Trade:				
Proprietors, officials, and managers	1,511,986	103,837	1,615,823	38.1
Clerks and kindred workers	1,515,560	547,324	2,062,884	48.6
Semiskilled workers	343,146	12,059	355,205	8.4
Laborers	203,743	6,699	210,442	4.9
Total	3,574,435	669,919	4,244,354	100.0
Public service (not elsewhere classified):				
Public officials	195,415	20,656	216,071	28.0
Semipublic officials (not elsewhere classified)	441,742	538	442,280	57.4
Laborers	111,559	1,210	112,769	14.6
Total	748,716	22,404	771,120	100.0

The Navy Department reports, which are restricted to artisans, laborers, and apprentices and helpers, show a total of 31,028 civilian

TOTAL PERSONS 10 YEARS OF AGE AND OVER ENGAGED IN GAINFUL OCCUPATIONS, DISTRIBUTED BY SEX AND CLASSES OF OCCUPATIONS, 1920—Concluded.

Occupation.	Males.	Females.	Total.	
			Number.	Per cent.
Professional service:				
Professional persons	1,123,659	1,005,128	2,128,787	98.9
Semiskilled workers	12,498	11,179	23,677	1.1
Total	1,136,157	1,016,307	2,152,464	100.0
Domestic and personal service:				
Proprietors, officials, and managers	218,907	146,342	365,249	10.7
Semiskilled workers	260,256	340,737	600,993	17.7
Servants	736,988	1,697,135	2,434,123	71.6
Total	1,216,151	2,184,214	3,400,365	100.0
Clerical occupations:				
Clerks and kindred workers	1,696,297	1,423,658	3,119,955	100.0
All occupations	**33,059,793**	**8,549,399**	**41,609,192**	**100.0**

Summary.

Occupation.	Males.		Females.		Total.	
	Number.	Per cent of all occupations.	Number.	Per cent of all occupations.	Number.	Per cent of all occupations.
Proprietors and salaried employees:						
Proprietors, officials, and managers	7,952,604	24.1	425,794	5.0	8,378,398	20.1
Clerks and kindred workers	3,468,541	10.5	2,169,603	25.4	5,638,144	13.6
Public and semipublic officials	637,157	1.9	21,194	.2	658,351	1.6
Professional persons	1,123,659	3.4	1,005,128	11.8	2,128,787	5.1
Total	13,181,961	39.9	3,621,719	42.4	16,803,680	40.4
Wage earners:						
Skilled workers	4,839,125	14.6	75,526	.9	4,914,651	11.8
Semiskilled workers	4,260,153	12.9	2,124,414	24.8	6,384,567	15.3
Laborers	10,041,566	30.4	1,030,605	12.1	11,072,171	26.6
Servants	736,988	2.2	1,697,135	19.8	2,434,123	5.9
Total	19,877,832	60.1	4,927,680	57.6	24,805,512	59.6
All occupations	**33,059,793**	**100.0**	**8,549,399**	**100.0**	**41,609,192**	**100.0**

Employees in Manufacturing Plants of the United States War and Navy Departments.

IN COMPLIANCE with a request from the Secretary of Labor, the War and Navy Departments have furnished the Bureau of Labor Statistics with information as to the number of civilian employees at approximately the first of February, 1922, in each of their manufacturing plants, together with an estimate of the number of employees that would be required were each department of each plant to be operated to full capacity one shift per day on the same kind of work as at present.

The War Department reports show a total of 10,167 civilian employees at approximately February 1, 1922, as compared with an estimate of 51,781 employees who would be required for full capacity operation.

WAR DEPARTMENT—Continued

The Navy Department reports, which are restricted to artisans, laborers, and apprentices and helpers, show a total of 31,028 civilian employees on the pay rolls as compared with an estimate of 105,256 who would be required for full capacity operation.

These two totals make a grand total of 41,195 civilian employees on the rolls, as of about February 1, as compared with an estimate of 157,037 that would be employed at full-capacity operation.

The Frankford, Rock Island, Springfield, Watertown, and Watervliet plants of the War Department, being engaged in more or less analogous work, have so large a number of occupations in common that their reports are tabulated together, in detail, by occupations arranged alphabetically. The Schuylkill and Jeffersonville plants of the Quartermaster's Department, the Picatinny Powder plant, and the Edgewood plant of the Chemical Warfare Service are presented briefly by departments only. Reports were received also from the Curtiss-Elmwood plant, Buffalo, and the United States Aeronautical Engine Plant, Long Island City, which had in February 114 and 56 employees respectively; but these are inactive plants and do not manufacture anything, and their personnel may be considered as already at "maximum capacity"; therefore, they are not included in the total figures for the War Department.

The occupations in the 14 Navy plants are tabulated in 3 groups, the occupations in each group being presented in alphabetical order.

WAR DEPARTMENT.

STATEMENT SHOWING NUMBER OF CIVILIAN EMPLOYEES IN EACH OCCUPATION, AND ESTIMATED NUMBER THAT WOULD BE EMPLOYED WERE EACH DEPARTMENT OF EACH ESTABLISHMENT TO BE OPERATED AT FULL CAPACITY, ONE SHIFT PER DAY, ON THE SAME KIND OF WORK AS AT PRESENT.

[1 = Number of employees Feb. 1, 1922 (approximately). 2 = Number of employees required for operation of plant at full capacity, one shift per day.]

Occupation.	Frankford Arsenal.		Rock Island Arsenal.		Springfield Armory.		Watertown Arsenal.		Watervliet Arsenal.		Total.	
	1	2	1	2	1	2	1	2	1	2	1	2
Acetylene burners							1	3			1	3
Acetylene welders			2	33					1	2	3	35
Annealers	1	7		2	1	10	3	4			5	23
Armature winders							1	3			1	3
Assemblers	4	68	26	430	13	80	37	585			80	1,163
Barrel arms:												
Cleaners					3	30					3	30
Drillers				8	2	15					2	23
Reamers				6	2	5					2	11
Rifflers				8	3	8					3	16
Straighteners				2	1	6					1	8
Turners				7	1	10					1	17
Catchers, chamberers, grinders, heaters, rollers, threaders				16								16
Belt adjusters	1	22	4	22	1	6	1	3			7	53
Benchmen			52	685	51	180					103	865
Blacksmiths	2	15	3	52	1	9	9	61	1	30	16	167
Bluers				2	1	8					1	10
Box makers					3	97					3	97
Brakemen							1	5			1	5
Bricklayers							2	18			2	18
Browners			1	6	2	35					3	41
Buckers-up								30				30
Boiler makers			1	10							1	10
Carpenters	14	140	8	167	3	26	11	150	4	30	40	513
Chauffeurs	2	15	14	24	3	16	3	40	2	8	24	103
Charwomen	5	26		2					1	3	6	31
Checkers			38	164				28	3	12	41	204
Checkers, gauge			8	12	6	18			2	8	16	38

WAR DEPARTMENT—Continued.

STATEMENT SHOWING NUMBER OF CIVILIAN EMPLOYEES IN EACH OCCU

WAR DEPARTMENT—Continued.

STATEMENT SHOWING NUMBER OF CIVILIAN EMPLOYEES IN EACH OCCUPATION, AND ESTIMATED NUMBER THAT WOULD BE EMPLOYED WERE EACH DEPARTMENT OF EACH ESTABLISHMENT TO BE OPERATED AT FULL CAPACITY, ONE SHIFT PER DAY, ON THE SAME KIND OF WORK AS AT PRESENT—Continued.

Occupation.	Frankford Arsenal.		Rock Island Arsenal.		Springfield Armory.		Watertown Arsenal.		Watervliet Arsenal.		Total.	
	1	2	1	2	1	2	1	2	1	2	1	2
Checkers, shop	9	151	13	67	.....	.....	3	5	2	4	27	227
Chemists	2	4	1	1	.....	.....	2	1	.....	.....	5	6
Chemists, assistants	.....	.....	.....	5	.....	.....	1	14	.....	.....	1	19
Chippers	.....	.....	.....	.....	.....	.....	16	83	.....	.....	16	83
Clerks	45	310	93	291	33	60	24	240	15	40	210	941
Clerks, chief and special	.....	.....	53	53	.....	.....	5	14	21	50	79	117
Clerks, minor	20	140	.....	60	7	140	14	142	7	75	48	557
Coal passers	.....	.....	.....	.....	.....	.....	5	24	3	4	8	28
Computers (Eng. Div.)	.....	.....	.....	.....	.....	.....	.....	8	2	6	2	14
Conductors	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	4
Core makers	.....	.....	.....	3	.....	.....	4	14	.....	.....	4	17
Crane grounds men	.....	.....	1	6	.....	.....	.....	.....	7	30	8	36
Crane men	.....	.....	.....	2	.....	.....	22	229	.....	.....	22	231
Crane men, electric	.....	.....	2	8	.....	.....	.....	.....	5	30	7	38
Designers	.....	.....	.....	.....	1	1	.....	82	.....	.....	1	83
Detailers	.....	.....	.....	.....	.....	.....	.....	100	.....	.....	.....	100
Die setters	.....	.....	1	5	.....	.....	.....	.....	.....	.....	1	5
Die sinkers	.....	.....	.....	10	1	15	.....	.....	.....	.....	1	25
Director housing and transportation	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	1
Draftsmen	23	140	78	109	6	30	29	58	10	21	146	358
Draftsmen, apprentices	2	15	.....	.....	.....	.....	.....	.....	.....	.....	2	15
Dynamo tenders	.....	.....	3	3	.....	.....	2	14	.....	.....	5	17
Electricians	4	25	10	28	4	10	7	50	3	30	28	143
Engineers:												
Administration, plant, etc	1	1	.....	5	.....	.....	.....	7	.....	.....	1	13
Mechanical	3	5	.....	12	3	6	.....	12	.....	.....	6	35
Research, metallurgical, etc	.....	.....	4	6	.....	.....	1	26	.....	.....	5	32
Ordnance	3	10	3	3	.....	.....	.....	.....	.....	.....	6	13
Tests	1	3	1	2	1	1	2	6	.....	.....	5	12
Enginemen:												
Locomotive	.....	.....	.....	.....	.....	.....	1	12	1	1	2	13
Stationary	3	21	.....	.....	.....	.....	1	18	.....	.....	4	39
Estimators	.....	.....	10	30	.....	.....	.....	.....	6	20	16	50
Firemen	.....	.....	9 19	12 28	6	12	7	28	7	7	48	87
Locomotive	.....	.....	2	3	.....	.....	.....	.....	.....	.....	2	3
Stationary	8	36	4	6	.....	.....	.....	.....	9	12	21	54
Foremen	54	160	68	102	13	23	20	79	8	8	163	372
Foremen, assistant	1	70	19	206	.....	.....	1	63	13	40	34	379
Forewomen	5	20	.....	.....	.....	.....	.....	.....	.....	.....	5	20
Furnace men	1	30	1	27	6	12	.....	.....	.....	.....	8	69
Gang bosses	.....	.....	.....	.....	.....	.....	24	296	.....	.....	24	296
Gardeners	1	1	3	3	.....	.....	1	1	1	2	6	7
Gauge makers	.....	.....	.....	12	13	30	.....	.....	.....	.....	13	42
Grinders	1	7	1	58	1	18	.....	.....	.....	.....	3	83
Grinders, lens	5	35	.....	.....	.....	.....	2	5	.....	.....	7	40
Gunners	7	20	.....	.....	4	12	.....	.....	.....	.....	11	32
Hammersmiths	.....	.....	.....	8	.....	.....	.....	3	.....	.....	.....	11
Harness makers	1	3	.....	15	.....	.....	.....	.....	.....	.....	1	18
Heaters, rivet	.....	.....	.....	.....	.....	.....	1	150	.....	.....	1	150
Helpers:												
Blacksmiths	2	5	5	70	1	6	10	32	1	30	19	143
Bricklayers	.....	.....	.....	.....	.....	.....	.....	18	.....	.....	.....	18
Carpenters	2	20	.....	.....	.....	.....	.....	25	2	20	4	65
Chauffeurs	.....	.....	.....	.....	.....	.....	.....	20	.....	.....	.....	20
Core makers	.....	.....	.....	.....	.....	.....	.....	8	.....	.....	.....	8
Electricians	5	35	7	25	.....	.....	4	47	1	20	17	127
Furnace	.....	.....	.....	.....	.....	.....	3	10	.....	.....	3	10
Hammersmiths	.....	.....	.....	4	.....	.....	.....	48	.....	.....	.....	52
Iron workers	.....	.....	2	10	.....	.....	.....	.....	.....	.....	2	10
Machinists	55	390	93	224	.....	.....	58	361	79	425	285	1,400
Masons	.....	.....	.....	1	.....	.....	3	12	1	3	4	16
Melters	.....	.....	.....	.....	.....	.....	.....	59	.....	.....	.....	59
Millwrights	7	60	.....	4	.....	.....	.....	.....	2	30	9	94
Molders	1	5	4	30	.....	.....	21	80	.....	.....	26	115
Painters	5	20	4	20	.....	.....	1	6	.....	.....	10	46
Pattern makers	.....	.....	2	2	.....	.....	2	2	.....	.....	4	4
Pipe fitters	6	35	.....	.....	.....	.....	1	24	2	10	9	69
Plumbers	1	8	12	12	.....	.....	.....	6	.....	.....	13	23
Press smith	.....	.....	.....	.....	.....	.....	1	4	.....	.....	1	4
Riggers	.....	.....	6	15	.....	.....	1	89	.....	.....	7	104

WAR DEPARTMENT—Continued.

STATEMENT SHOWING NUMBER OF CIVILIAN EMPLOYEES IN EACH OCCUPATION, AND ESTIMATED NUMBER THAT WOULD BE EMPLOYED WERE EACH DEPARTMENT OF EACH ESTABLISHMENT TO BE OPERATED AT FULL CAPACITY, ONE SHIFT PER DAY, ON THE SAME KIND OF WORK AS AT PRESENT—Continued.

Occupation.	Frankford Arsenal.		Rock Island Arsenal.		Springfield Armory.		Watertown Arsenal.		Watervliet Arsenal.		Total.	
	1	2	1	2	1	2	1	2	1	2	1	2
Helpers—Concluded.												
Riveters								18				18
Steam fitters				12			4	8			4	20
Storekeepers			38	38					7	25	45	63
Structural-steel workers								24				24
Tinsmiths	8	30					1	4			9	34
Hostlers	1	4				4		3			1	11
Inspectors	105	650	26	464	47	382	12	106	1	2	191	1,604
Instructors							1	4			1	4
Instrument makers	31	217	2	2							33	219
Janitors	16	75	31	77	3	10	3	32	5	15	58	209
Jewelers			3	3							3	3
Laboratory assistants	8	20	1	1	2	15	10	10			21	46
Laborers	67	760	52	862	33	525	67	774	37	200	256	3,121
Ladle men							2	13			2	13
Layout men								7				7
Leather worker				13								13
Lime men								6				6
Machine molders							1	10			1	10
Machine operators	151	1,657	89	1,996	83	936	59	1,188			382	5,777
Machinists	72	575	129	1,791	2	64	221	1,651	185	800	609	4,881
Machinists' apprentices	20	100	35	125	6	20	22	33	12	50	95	328
Masons	2	5	1	3	1	5				3	4	16
Master mechanics			1	1			1		1	1	3	2
Material keepers			18	18	10	42	9	135			37	195
Melters			1	8			3	9			4	17
Messengers	2	7	4	16	2	44	3	38	2	9	13	114
Metallurgists	1	4	2	2			1	1	1	1	5	8
Metallographists and assistants							1	4			1	4
Millers			1	80							1	80
Millwrights	7	50		11	2	10			3	20	12	91
Molders	2	5	4	30			25	70			31	105
Move men			8	67			4	20	2	6	14	93
Oilers	2	14	9	39	6	30		15			17	98
Operators:												
Addressograph							1	4			1	4
Calculating machine							5	43			5	43
Drawbridge			6	6							6	6
Duplicating machine			2	2							2	2
Elevator	2	20	6	23						1	8	44
Filter (water)			4	7							4	7
Photostat	1	4	1	6			1	2			3	12
Punch and tabulating machine							1	7			1	7
Pyrometer			2	2							2	2
Star gauge			3	20							3	20
Packers	3	30	14	24	7	30	1	10			25	94
Pad makers							1	3			1	3
Painters	3	24	11	49	1	16	2	50	1	4	18	143
Pattern makers	1	15	4	27	1	4	25	50			31	96
Photographers			1	1	1	2	1	3			3	6
Picklers			3	10	1	5					4	15
Pipe fitters	5	35		1			1	24	2	10	8	70
Pitmen								25				25
Platers	1	8		9							1	17
Plumbers	1	8	5	8		5	1	6			7	27
Policemen	5	36	29	44	6	50	6	30	3	12	49	172
Polishers			1	74	12	110					13	184
Pressmen						12						12
Printers	2	10	3	14		6	1	2	1	2	7	34
Production assistants					6	50	17	112			23	162
Profilers				70								70
Proof assistant					2	8					2	8
Purchasing agents and assistants								5				5
Pyrometrists and assistants								6				6
Repairmen—automobile, tractor, typewriter	2	6	39	42	1	2	1	3			43	53
Riggers	1	7		8			10	219	7	30	18	264
Riveters							2	42			2	42
Saw filers			1	2			1	3			2	5
Shearmen				5								5
Sheet-metal workers			4	4				12			4	16

WAR DEPARTMENT—Concluded.

STATEMENT SHOWING NUMBER OF CIVILIAN EMPLOYEES IN EACH OCCUPATION, AND ESTIMATED NUMBER THAT WOULD BE EMPLOYED WERE EACH DEPARTMENT OF EACH ESTABLISHMENT TO BE OPERATED AT FULL CAPACITY, ONE SHIFT PER DAY, ON THE SAME KIND OF WORK AS AT PRESENT—Concluded.

Occupation.	Frankford Arsenal.		Rock Island Arsenal.		Springfield Armory.		Watertown Arsenal.		Watervliet Arsenal.		Total.	
	1	2	1	2	1	2	1	2	1	2	1	2
Shippers	.....	.....	4	11	.....	.....	.....	.....	1	5	5	16
Skilled workmen	.....	.....	.....	.....	.....	.....	.....	24	.....	.....	.....	24
Squad bosses	.....	.....	.....	.....	.....	.....	3	13	.....	.....	3	13
Steel pourers	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	3
Stockers	.....	.....	.....	.....	.....	.....	.....	24	.....	.....	.....	24
Stock finishers	.....	.....	.....	40	10	60	.....	.....	.....	.....	10	100
Steam hammermen	.....	.....	.....	.....	.....	.....	2	18	.....	.....	2	18
Stopper rodmen	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	3
Steam fitters	.....	.....	7	12	2	10	4	12	.....	.....	13	34
Stenographers	8	50	18	67	.....	.....	8	89	3	15	37	221
Storekeepers	7	20	8	23	1	3	.....	2	.....	.....	16	48
Storekeepers' assistants	10	70	7	17	1	4	2	5	.....	.....	20	96
Structural-steel workers	.....	.....	.....	.....	.....	.....	2	12	5	2	7	14
Superintendents	1	5	6	12	.....	.....	1	24	.....	.....	8	41
Switchboard attendants	.....	.....	3	3	.....	.....	3	14	3	4	9	21
Targeter	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	6
Teamsters	3	6	.....	2	.....	6	1	6	1	3	5	23
Temperers	.....	.....	3	3	8	21	.....	.....	.....	.....	11	24
Timekeepers	.....	.....	9	58	.....	.....	.....	15	.....	.....	9	73
Tinsmiths	3	21	.....	20	1	4	.....	.....	1	2	5	47
Tool keepers	12	110	9	37	14	100	14	128	4	30	53	405
Toolmakers	64	685	30	60	27	157	17	225	5	74	143	1,201
Tracers	1	5	.....	.....	.....	.....	.....	.....	.....	.....	1	5
Typists	2	15	15	111	.....	.....	34	258	2	65	53	449
Welders	.....	.....	.....	.....	.....	.....	6	27	.....	.....	6	27
Wheelwrights	.....	.....	.....	.....	1	2	.....	.....	.....	.....	1	2
Wiremen	.....	.....	.....	.....	.....	.....	.....	.....	3	10	3	10
Yardmasters	.....	.....	1	1	1	1	.....	4	1	1	3	7
Miscellaneous	1	14	18	184	8	11	11	93	9	85	47	387
Total	947	7,455	1,423	10,048	506	3,701	1,005	9,412	531	2,499	4,412	33,115

Department.	Employees.		Department.	Employees.	
	Number engaged Feb. 1, 1922 (approximately).	Number required for operation of plant, full capacity, one shift.		Number engaged Feb. 1, 1922 (approximately).	Number required for operation of plant, full capacity one shift.
Schuylkill Arsenal—Quartermaster's Department.			*Picatinny Arsenal*[1]*—Powder making and loading.*		
Construction	45	70	Powder factory	25	45
Administrative	71	272	Bag loading	38	123
Finance accounting	14	60	High explosive loading	99	194
Procurement	1,151	2,612	Metal components	80	174
Supplies	329	1,411	High explosives and raw material manufacturing	6	9
Transportation	35	54	Pyrotechnics	6	19
Total	1,645	4,479	Stores	130	147
Jeffersonville Arsenal—Quartermaster's Department.			Service	229	278
			Administration	95	120
			Total	708	1,109
Manufacturing	1,285	3,209	*Edgewood Arsenal—Chemical Warfare Service.*		
Administrative and personnel	93	349			
Purchase—Supply Service	14	532			
Storage—Supply Service	225	3,194	Technical Service	158	502
Utilities—Construction Service	90	313	Accounting and clerical	124	415
Rail transport	15	180	Helpers and mechanical	815	2,147
Motor transport	179	942	Laborers	404	1,205
Total	1,901	8,809	Total	1,501	4,269
Grand total of all War Department plants				10,167	51,781

[1] December, 1921, payroll.

NAVY DE

STATEMENT SHOWING NUMBER OF CIVILIAN EMPLOYEES IN EACH TRADE OR
AND GROUP III (ARTISANS), ON THE SCHEDULE OF WAGES FOR THE NAVAL
EACH DEPARTMENT OF EACH ESTABLISHMENT TO BE OPERATED AT FULL

[1 shows number of civilian employees in each trade or occupation, on the Schedule of Wages for the Naval
Schedule of Wages for the Naval Establishment, that would be employed were each department of each

Trade or occupation.	Portsmouth.		Boston.		New York.		Philadelphia.		Naval Aircraft Factory, Philadelphia.		Washington.	
	1	2	1	2	1	2	1	2	1	2	1	2
Group I.												
Janitors	32	40	31	155	33	48	53	86	39	45	77	117
Laborers, common	113	400	390	1,961	415	1,089	477	1,235	95	150	490	715
Group II.												
Apprentices	52	75	43	205	69	373	86	269	6	10	167	442
Hammer runners	3	6	4	36	.....	.....	3	10	.....	.....	10	16
Helpers:												
Blacksmiths	.....	.....	1	5	.....	.....	.....	.....			51	101
Boiler makers	4	10	7	35	46	200	38	220			27	36
Coppersmiths	19	25	10	40	12	40	30	100			3	6
Electricians	19	50	27	157	42	581	38	170			1	1
Flange turners	22	30	11	55	4	8	.....	.....			.....	.....
Forgers, heavy	.....	.....	12	108	3	3	.....	24			.....	.....
General	236	1000	132	700	198	832	497	1,455			565	746
Laboratory	.....	.....	.....	.....	10	12	3	3			22	30
Machinists	68	300	50	206	114	491	126	470	392	1200	58	84
Molders	2	20	10	50	17	80	33	95			34	50
Pipe fitters	14	50	14	63	10	100	14	220			19	24
Rope makers	.....	.....	10	80	.....	.....	.....	.....			.....	.....
Sheet-metal workers	12	25	13	428	35	70	30	250			21	38
Ship fitters	58	300	90	446	78	300	90	458			.....	.....
Ship smiths	24	105	23	203	9	9	47	109			.....	.....
Woodworkers	14	125	18	137	21	401	42	126			.....	.....
Hod carriers	.....	.....	.....	.....	4	16	.....	.....	.....	.....	1	10
Holders-on	9	45	13	65	12	197	14	150	.....	.....	.....	.....
Laborers, classified	11	20	.....	.....	.....	.....	6	250	.....	.....	4	20
Lens cleaners, inspectors, and bench hands	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	10
Oilers	5	5	5	20	.....	.....	14	25	.....	.....	26	35
Fitmen	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rivet heaters	13	25	13	65	17	395	37	250	.....	.....	.....	.....
Sand blasters	1	2	1	5	3	5	1	1	1	2	5	8
Stable keepers	1	2	4	20	5	5	2	6	.....	.....	.....	.....
Stevedores	4	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Teamsters	12	12	9	45	11	11	25	33	.....	.....	.....	.....
Group III.												
Aircraft mechanics, general	.....	.....	.....	.....	.....	.....	.....	.....	27	300	.....	.....
Aircraft mechanics, motors	.....	.....	.....	.....	.....	.....	.....	.....	18	100	.....	.....
Anglesmiths	4	15	5	25	4	57	6	16	.....	.....	.....	.....
Blacksmiths	.....	.....	1	5	.....	.....	2	4	.....	6	40	71
Blueprinters	1	2	1	5	6	6	8	12	4	6	20	25
Boat builders	32	75	22	220	58	194	28	150	13	80	.....	.....
Boiler makers	8	25	28	140	43	300	37	230	.....	.....	77	82
Bolters	.....	.....	11	55	.....	.....	37	228	.....	.....	.....	.....
Box makers	1	2	11	55	.....	.....	2	2	.....	.....	.....	78
Brakemen	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1
Buffers and polishers	4	25	1	5	5	14	2	11	2	4	27	55
Canvas workers	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	17
Calkers, wood	2	10	4	12	4	44	11	30	.....	.....	1	2
Calkers and chippers, iron	27	60	23	115	34	480	23	200	.....	.....	.....	.....
Cementers	.....	.....	7	35	.....	.....	.....	.....	.....	.....	.....	.....
Chain makers	.....	.....	6	54	.....	.....	.....	.....	.....	.....	.....	.....
Chauffeurs	15	20	19	95	30	88	35	38	5	10	51	46
Conductors, railroad	.....	.....	.....	.....	7	17	6	12	.....	.....	5	3
Coopers	.....	.....	1	5	2	2	.....	.....	.....	.....	.....	.....
Coppersmiths	19	25	17	68	12	40	31	105	7	20	33	33
Cranemen	5	5	24	60	20	67	38	43	6	6	73	80
Cupola tenders	.....	.....	1	5	1	3	2	2	.....	.....	3	4
Die sinkers	2	2	4	12	7	10	.....	.....	.....	.....	3	6
Divers	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Drillers	56	80	36	180	43	624	48	362	1	1	.....	.....
Electricians	80	120	121	654	201	1,200	154	384	12	18	.....	.....
Electroplaters	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Enginemen	16	25	38	190	40	68	63	103	6	6	24	19

NAVY DEPART

PARTMENT.

OCCUPATION GROUP I (LABORERS), GROUP II (APPRENTICES AND HELPERS), ESTABLISHMENT, AND ESTIMATED NUMBER THAT WOULD BE EMPLOYED WERE CAPACITY, ONE SHIFT PER DAY, ON THE SAME KIND OF WORK AS AT PRESENT.

Establishment. 2 shows estimated number of civilian employees in each trade or occupation, on the establishment to be operated at full capacity, one shift per day, on the same kind of work as at present.]

Norfolk.		Charleston.		Mare Island.		Puget Sound.		Torpedo Station, Newport, R. I.		Torpedo Station, Alexandria.		Ordnance plant, South Charleston.		Naval Station, New Orleans.		Total	
1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
44	200	14	28	37	106	70	124	13	20	2	4	19	19	2	2	466	994
494	3,911	251	550	488	1,394	280	420	77	150	41	80	269	281	56	140	3,936	12,476
151	399	33	100	138	382	59	127	54	72	27	110	24	31	2	.....	911	2,595
.....	.....	2	5	.....	.....	.....	.....	.....	.....	.....	.....	2	2	.....	.....	24	75
.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	2	14	13	.....	20		
26	270	7	25	30	86	37	148	.....	.....	.....	.....	.....	.....	2	142		
10	96	2	16	17	45	20	80	.....	.....	.....	.....	.....	.....	.....	.....		
14	330	5	30	57	162	42	105	5	8	.....	.....	.....	.....	.....	.....		
7	54	.....	.....	3	9	8	30	.....	.....	.....	.....	.....	.....	.....	.....		
.....	.....	5	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
77	441	62	150	254	723	178	748	207	518	26	60	294	409	103	379		
2	4	.....	.....	.....	.....	3	3	.....	.....	.....	.....	7	7	4	60		
84	500	23	125	137	360	128	355	45	.....	.....	.....	3	3	.....	.....	6771	25,468
24	310	5	25	24	69	27	275	.....	.....	.....	.....	6	10	.....	5		
20	220	10	75	96	275	118	271	.....	.....	.....	.....	.....	.....	.....	.....		
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
32	200	14	30	95	271	58	75	.....	.....	.....	.....	.....	.....	.....	33		
41	675	4	60	192	546	120	381	.....	.....	.....	.....	.....	.....	.....	1		
23	167	3	12	31	86	27	71	.....	.....	.....	.....	.....	.....	.....	.....		
39	500	4	30	67	190	36	177	.....	.....	.....	.....	5	5	.....	2		
1	35	.....	.....	.....	.....	.....	.....	1	1	.....	.....	31	32	.....	.....	38	94
9	120	7	20	12	34	16	62	.....	.....	.....	.....	.....	.....	.....	.....	92	693
21	200	.....	.....	53	151	36	60	.....	.....	.....	.....	47	126	.....	.....	178	827
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	10
16	65	.....	.....	2	5	11	22	.....	.....	3	5	.....	.....	.....	.....	82	182
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	9	.....	.....	1	9
10	140	7	20	18	46	12	48	.....	.....	.....	.....	.....	.....	.....	.....	127	989
3	30	.....	.....	.....	.....	2	20	.....	.....	.....	.....	.....	.....	.....	.....	17	73
.....	.....	1	2	1	3	1	1	.....	.....	.....	.....	.....	.....	.....	.....	15	39
.....	.....	4	15	100	350	7	7	.....	.....	.....	.....	.....	.....	.....	.....	115	382
16	50	12	15	16	42	.....	.....	.....	.....	.....	.....	23	23	.....	.....	124	231
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27	300
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18	100
.....	.....	3	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22	125
.....	.....	1	2	.....	.....	.....	.....	3	3	1	5	15	15	.....	16	63	127
3	10	2	3	5	14	1	1	3	5	.....	.....	2	2	.....	.....	56	91
33	300	17	100	25	70	19	150	.....	.....	.....	.....	.....	.....	.....	8	247	1,347
40	362	.....	.....	29	83	38	136	3	5	.....	.....	1	1	.....	58	304	1,422
.....	.....	2	30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50	313
.....	.....	3	5	3	9	3	3	1	3	.....	.....	.....	.....	1	.....	25	157
4	12	.....	.....	.....	.....	7	7	.....	.....	.....	.....	.....	.....	.....	.....	13	20
2	20	.....	.....	2	5	4	9	.....	.....	8	25	.....	.....	.....	.....	57	173
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	17
9	108	.....	.....	5	14	6	40	.....	.....	.....	.....	.....	.....	1	18	43	278
14	196	18	54	30	86	13	53	.....	.....	.....	.....	.....	.....	.....	3	182	1,247
13	50	2	12	30	86	9	13	.....	.....	.....	.....	2	2	.....	.....	63	198
.....	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	7	56
25	100	13	15	56	160	17	17	5	6	1	2	6	7	1	.....	279	604
1	3	.....	.....	.....	.....	2	2	.....	.....	.....	.....	4	3	.....	.....	25	40
.....	.....	.....	.....	1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	10
14	138	2	20	23	65	18	70	13	18	7	30	.....	.....	.....	7	196	639
12	102	7	15	13	38	15	26	.....	.....	.....	.....	66	70	.....	.....	279	512
1	6	.....	.....	2	6	2	5	.....	.....	.....	.....	3	2	.....	.....	15	33
3	15	.....	.....	5	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24	59
.....	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	3
30	420	22	52	52	140	68	279	.....	.....	.....	.....	10	14	.....	8	366	2,160
108	1021	46	80	210	600	124	342	20	25	3	8	51	81	4	41	1134	4,574
.....	.....	1	2	.....	.....	.....	.....	4	6	.....	.....	.....	.....	.....	.....	5	8
42	140	16	25	61	174	49	66	9	11	1	2	60	61	5	6	430	896

NAVY DEPART

STATEMENT SHOWJNG NUMBER OF CIVILIAN EMPLOYEES IN EACH TRADE OR AND GROUP III (ARTISANS), ON THE SCHEDULE OF WAGES FOR THE NAVAL EACH DEPARTMENT OF EACH ESTABLISHMENT TO BE OPERATED AT FULL

Trade or occupation.	Portsmouth.		Boston.		New York.		Philadelphia.		Naval Aircraft Factory, Philadelphia.		Washington.	
	1	2	1	2	1	2	1	2	1	2	1	2
Group III—Continued.												
Enginemen, locomotive											7	6
Enginemen, pile drivers												
Enginemen, steam shovel												
Firemen	32	35	29	145	41	62	63	106	9	9	20	20
Flange turners	7	10	1	5	1	10	5	5			8	9
Forgers	2	2	5	45	7	29		8			9	20
Foundry chippers	6	12	5	25	7	45	10	16			26	44
Frame benders			1	5			3	6				
Furnace men			2	18			9	28			32	44
Galvanizers	1	5	1	5	1	2	3	4				
Gardeners			1	5	1	1	1	1	1	1	1	1
Glass workers, optical, fire											11	20
Grinders and polishers, optical, glass											26	59
Inspectors, optical parts											2	5
Instrument assemblers											21	73
Instrument makers	1	2	6	26	9	40	3	4	2	10	15	41
Jackmen												
Joiners	55	400	47	293	68	457	50	283	95	200	77	109
Joiners, ship											8	13
Ladle men, foundry	3	4	2	10			1	2			3	3
Leather workers	1	3									3	3
Letterers and grainers			2	10	2	20					3	6
Levelers	2	2					2	4			1	2
Lever men												
Loftsmen			12	42	3	103	24	45	2	6		
Machine operators	19	100			16	40	26	110	2	20		
Machinists	272	600	250	1,061	521	2,050	453	1,225	140	300	1930	2886
Masons, brick or stone	3	25	4	20	9	60	3	3	1	2	3	20
Mattress makers								59				
Melters	3	25	6	30	5	8					1	5
Melters, electric							2	10				
Melters, open-hearth												
Metallic cartridge casemakers											16	69
Millmen			8	68	7	28	11	21	8	12	11	51
Model makers, wood											4	10
Model testers											1	2
Molders	21	100	16	80	28	192	65	192			81	225
Operators, charging machine												
Optical glass plate and gauge makers											14	23
Optical instrument finishers											6	10
Optical instrument makers											18	47
Ordnance men	1	1	10	44	5	10	46	101	1	2	78	103
Packers	7	20			25	25						
Painters	23	100	31	155	39	291	64	300	15	100	34	62
Pattern makers	20	30	11	66	23	100	42	78	10	20	67	109
Pavers					2	8	1	5				
Pipe coverers and insulators	5	5					11	53				
Pipe fitters	31	75	36	163	26	100	48	161	10	12	29	24
Pit foremen												
Plasterers											1	6
Plumbers	8	30	30	125	52	212	24	65			6	10
Polish and wax mixers											2	4
Pressmen			2	10								
Projectors, armor plate												
Punchers and shearers	6	20	6	34	3	26	22	65				
Pyrometer men												
Riggers	36	50	62	310	96	412	75	360	10	12	14	14
Riveters	19	45	16	80	10	199	20	150				
Rodmen					1	1	1	3				
Rollers, brass and copper											2	4
Ropemakers			21	168								
Sailmakers	6	15	12	36	13	91	13	63	5	15		
Saw filers	3	3	1	10	1	2	3	6				
Sewers					18	67	2	29			2	2
Sheet-metal workers	32	65	36	208	77	381	63	351	83	100	53	94
Ship fitters	79	100	46	231	66	1,068	110	445				
Ship smiths	10	35	12	98	8	75	14	40	2	4		
Shipwrights	36	40	30	90	63	141	102	200			7	15

[994]

MENT—Continued.

OCCUPATION, GROUP I (LABORERS), GROUP II (APPRENTICES AND HELPERS, ESTABLISHMENT, AND ESTIMATED NUMBER THAT WOULD BE EMPLOYED WERE CAPACITY, ONE SHIFT PER DAY, ON THE SAME KIND OF WORK AS AT PRESENT—Con.

Norfolk.		Charleston.		Mare Island.		Puget Sound.		Torpedo Station, Newport, R. I.		Torpedo Station, Alexandria.		Ordnance plant, South Charleston.		Naval Station, New Orleans.		Total.	
1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
3	12	1	5	.....	.....	4	4	.....	.....	.....	.....	8	8	.....	.....	23	35
.....	.....	3	3	7	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	23
.....	.....	.....	.....	1	3	1	1	.....	.....	.....	.....	.....	.....	.....	.....	2	4
40	110	20	24	23	66	15	17	14	14	4	6	40	49	10	22	360	685
3	24	3	4	1	3	4	14	.....	.....	.....	.....	.....	.....	.....	.....	33	84
4	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27	122
3	60	.....	.....	9	26	13	87	3	4	1	2	10	17	.....	.....	93	338
.....	.....	1	2	2	5	3	9	.....	.....	.....	.....	.....	.....	.....	.....	10	27
5	29	1	1	5	14	6	33	2	2	.....	.....	55	66	.....	1	117	236
2	15	1	2	4	11	3	16	.....	.....	.....	.....	.....	.....	.....	.....	16	60
1	1	.....	.....	1	3	.....	.....	1	1	.....	.....	.....	.....	.....	2	8	16
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	20
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26	59
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	5
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21	73
.....	.....	.....	.....	9	26	6	15	1	1	.....	.....	.....	.....	.....	.....	52	165
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	6	.....	.....	4	
57	710	8	16	61	175	59	166	13	35	4	4	52	29	16	247	662	3,124
.....	.....	28	50	46	131	3	10	.....	.....	.....	.....	.....	.....	.....	.....	85	204
.....	.....	.....	.....	.....	.....	1	5	.....	.....	.....	.....	5	7	.....	.....	15	31
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	2	.....	.....	6	8
2	20	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	10	57
.....	.....	.....	.....	7	21	1	2	.....	.....	.....	.....	.....	.....	.....	.....	13	31
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	14	.....	.....	11	14
.....	.....	.....	.....	12	34	6	18	.....	.....	.....	.....	.....	.....	.....	.....	59	248
.....	.....	.....	.....	26	74	28	69	24	44	8	20	27	25	.....	.....	176	502
335	1,852	92	400	694	1,981	321	391	747	1,195	251	1,200	189	224	7	142	6,202	15,507
3	30	2	2	7	21	3	20	2	4	.....	.....	26	39	.....	11	66	257
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	68
1	3	.....	.....	.....	.....	1	15	.....	.....	.....	.....	11	18	.....	.....	15	46
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	6	.....	.....	5	6
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16	69
11	110	.....	.....	.....	.....	4	15	.....	.....	.....	.....	.....	.....	.....	.....	60	305
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20	28	.....	.....	21	30
27	350	9	30	23	65	26	215	10	17	.....	.....	.....	.....	.....	10	306	1,476
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	3	.....	.....	3	3
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	23
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18	47
17	50	2	5	24	57	9	22	84	510	15	30	.....	.....	3	.....	295	945
15	100	1	8	36	100	8	28	1	1	.....	.....	.....	.....	.....	.....	93	262
65	675	13	50	53	151	44	24	3	6	1	2	18	8	2	23	405	2,147
16	150	2	30	42	120	20	30	2	4	.....	.....	10	12	.....	9	265	758
3	30	2	2	9	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	70
13	80	5	30	18	51	18	50	.....	.....	.....	.....	.....	.....	.....	2	70	271
21	225	19	100	132	375	110	308	7	12	1	4	52	48	1	27	523	1,634
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	4	.....	.....	4	4
1	5	.....	.....	1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	14
10	110	10	40	2	6	11	25	2	3	.....	.....	1	1	2	6	158	633
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	4
.....	.....	.....	.....	3	9	.....	.....	.....	.....	.....	.....	11	9	.....	.....	16	28
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	2	.....	.....	2	2
2	28	4	13	3	9	6	23	.....	.....	.....	.....	.....	.....	.....	4	52	222
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	3	.....	.....	2	3
30	144	13	30	97	277	142	371	4	8	.....	.....	29	29	.....	13	608	1,970
9	126	8	30	13	37	12	44	.....	.....	.....	.....	.....	.....	.....	36	107	747
1	5	2	4	5	14	2	4	.....	.....	.....	.....	5	5	.....	1	17	37
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	4
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21	168
19	230	15	30	27	77	12	30	.....	.....	.....	.....	.....	.....	.....	4	122	591
.....	.....	.....	.....	4	10	2	6	.....	.....	.....	.....	1	1	.....	.....	15	38
.....	.....	.....	.....	28	80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50	178
57	340	24	75	89	250	74	98	35	45	16	30	3	5	.....	43	642	2,085
43	700	32	150	22	55	58	175	.....	.....	.....	.....	.....	.....	.....	4	456	2,928
21	170	7	20	30	84	21	49	.....	.....	.....	.....	.....	.....	.....	.....	125	575
37	500	16	40	70	200	21	150	.....	.....	.....	.....	.....	.....	.....	11	382	1,387

NAVY DEPART

STATEMENT SHOWING NUMBER OF CIVILIAN EMPLOYEES IN EACH TRADE OR AND GROUP III (ARTISANS), ON THE SCHEDULE OF WAGES FOR THE NAVAL EACH DEPARTMENT OF EACH ESTABLISHMENT TO BE OPERATED AT FULL

Trade or occupation.	Portsmouth.		Boston.		New York.		Philadelphia.		Naval Aircraft Factory, Philadelphia.		Washington.	
	1	2	1	2	1	2	1	2	1	2	1	2
Group III—Concluded.												
Steel workers, structural	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stonecutters	.....	.....	1	5	.....	.....	.....	.....	.....	.....	1	2
Switchmen	2	3	11	55	15	41	38	60	.....	.....	.....	.....
Temperers	1	1	2	18	1	3	.....	.....	.....	.....	3	10
Tile and plate setters	.....	.....	1	5	.....	.....	.....	.....	.....	.....	.....	.....
Toolmakers	10	15	11	44	22	42	18	38	15	30	272	463
Trackmen	1	5	6	30	14	56	26	75	.....	.....	.....	.....
Upholsterers	3	3	3	9	1	2	3	34	1	2	1	2
Water tenders	.....	.....	4	20	4	5	17	20	.....	.....	.....	.....
Welders, electric	14	15	6	29	5	24	16	52	.....	.....	4	5
Welders, gas	14	15	15	74	15	100	18	75	10	15	2	5
Wharf builders	.....	.....	5	25	13	48	19	40	.....	.....	.....	.....
Wheelwrights	.....	.....	1	5	1	6	.....	.....	.....	.....	.....	.....
Wireworkers	.....	.....	.....	.....	4	4	1	6	7	14	.....	.....
PRINT SHOP RATINGS.												
Group II.												
Press feeder, folder and stitcher, etc.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Group III.												
Job printers	2	2	1	5	1	1	.....	.....	.....	.....	.....	.....
Machinists, operators	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pressmen	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....
Total	1817	5191	2149	11330	3036	15169	3790	12894	1063	2850	4885	7761

Extent of Operation of Bituminous Coal Mines

MENT—Concluded.

OCCUPATION, GROUP I (LABORERS), GROUP II (APPRENTICES AND HELPERS), ESTABLISHMENT, AND ESTIMATED NUMBER THAT WOULD BE EMPLOYED WERE CAPACITY, ONE SHIFT PER DAY, ON THE SAME KIND OF WORK AS AT PRESENT—Con.

Norfolk.		Charleston.		Mare Island.		Puget Sound.		Torpedo Station, Newport, R. I.		Torpedo Station, Alexandria.		Ordnance plant, South Charleston.		Naval Station, New Orleans.		Total.	
1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	9	.....	.....	9	9
1	500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	12
.....	.....	2	4	22	55	.....	.....	.....	.....	.....	.....	15	11	.....	.....	105	229
.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	13	22	.....	.....	21	55
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	5
17	85	5	15	14	42	12	36	40	78	17	25	41	42	.....	.....	494	955
10	50	2	4	27	77	4	5	.....	.....	.....	.....	.....	.....	.....	.....	90	302
1	15	.....	.....	3	9	2	5	.....	.....	.....	.....	.....	.....	.....	.....	18	81
6	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	31	57
6	24	3	8	16	40	17	34	.....	.....	.....	.....	.....	.....	.....	.....	87	231
10	36	7	10	18	44	20	70	.....	.....	.....	.....	10	10	.....	.....	139	454
6	70	4	10	46	130	6	10	.....	.....	.....	.....	.....	.....	.....	2	99	335
1	4	.....	.....	1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	18
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	24
.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
.....	.....	1	2	2	6	3	3	.....	.....	.....	.....	.....	.....	.....	.....	10	19
.....	.....	1	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	20
.....	.....	.....	.....	.....	.....	4	4	.....	.....	.....	.....	.....	.....	.....	.....	5	5
2453	19233	1001	3048	4215	11989	2839	7738	1460	2837	439	1656	1659	1990	222	1570	31028	105,256

Extent of Operation of Bituminous Coal Mines.

CONTINUING the report on this subject in the April MONTHLY LABOR REVIEW, the following table shows for a large number of coal mines the number of mines closed the entire week and the number working certain classified hours per week for each week from February 18 to March 18, inclusive. The number of mines reporting varied each week and the figures are not given as a complete presentation of all mines, but are believed fairly to represent the conditions as to irregular work in the bituminous mines of the country.

These figures are based on data furnished the bureau by the United States Geological Survey.

WORKING TIME IN BITUMINOUS COAL MINES FOR EACH WEEK, FEBRUARY 18 TO MARCH 18, 1922.

[Prepared by the Bureau of Labor Statistics from data furnished by the United States Geological Survey.]

Week ending—	Number of mines reporting.	Mines—							
		Closed entire week.		Working less than 8 hours.		Working 8 and less than 16 hours.		Working 16 and less than 24 hours.	
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Feb. 18	2,577	896	34.8	54	2.1	147	5.7	254	9.9
Feb. 25	2,583	879	34.0	63	2.4	161	6.2	288	11.1
Mar. 4	2,515	877	34.9	51	2.0	148	5.9	230	9.1
Mar. 11	2,531	833	32.9	47	1.9	139	5.5	232	9.2
Mar. 18	2,557	881	34.5	43	1.7	171	6.7	271	10.6

Week ending—	Number of mines reporting.	Mines—							
		Working 24 and less than 32 hours.		Working 32 and less than 40 hours.		Working 40 and less than 48 hours.		Working full time of 48 hours or more.	
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Feb. 18	2,577	336	13.0	270	10.5	334	13.0	286	11.1
Feb. 25	2,583	306	11.8	333	12.9	348	13.5	205	7.9
Mar. 4	2,515	289	11.5	301	12.0	321	12.8	298	11.8
Mar. 11	2,531	283	11.2	275	10.9	375	14.8	347	13.7
Mar. 18	2,557	275	10.8	263	10.3	288	11.3	365	14.3

Government Construction Contracts.

In response to frequent requests for information along this line, the Bureau of Labor Statistics has undertaken to compile and publish in the MONTHLY LABOR REVIEW certain information relating to contracts entered into by the several departments and independent establishments of the Government as reported from time to time by these departments.

The following table gives under each department or independent establishment the name and address of the contractor, the date and amount of the contract, and the character of the work, or so much of this information as has been reported to the bureau.

RECENT CONSTRUCTION CONTRACTS ENTERED INTO BY THE VARIOUS DEPARTMENTS OF THE UNITED STATES GOVERNMENT.

Department and contract number.	Contractor's— Name.	Address.	Contract. Date.	Amount.	Nature of contract.	Time limit.
Treasury.						
.....	Algernon Blair	Montgomery, Ala	[1]Mar. 25, 1922	$50,684	Building post office, Salem, Va	12 months from date of contract.
.....	Chas. H. Bilderback	944 High St., Eugene, Oreg	[1]Mar. 21, 1922	8,000	Repairs, post office, Salem, Oreg	90 days from date of contract.
.....	Leesley Bros	6100 N. Crawford Ave., Chicago, Ill.	[1]Mar. 23, 1922	40,491	Planting trees and shrubs, Ed. Hines, jr., Hospital, Haywood, Ill.	May 20, 1922.
.....	M. Serette	3 Tremont Row, Boston, Mass	.....[1] do	184,000	U. S. Quarantine Station, Hoffman Island, N. Y.	8 months from date of contract.
.....	F. G. Allin Contracting Co	1442 Syndicate Trust, St. Louis, Mo.	[1]Mar. 21, 1922	6,147	U. S. Veterans' Hospital, Whipple Barracks, Prescott, Ariz.	90 days from date of contract.
.....	Moland-Clifford Co. (Inc.)	Newport News, Va	[1]Mar. 23, 1922	89,664	U. S. Quarantine Station, Hoffman Island, N. Y.	8 months from date of contract.
War.						
.....	Bethlehem Shipbuilding Corp.	Alameda, Calif	Apr. —, 1922	38,000	Underwater repairs to Wheaton, Alameda, Calif.	18 days.
.....	[2]		.....do	[3] 51,000	General repairs to Thomas, San Francisco, Calif.	
.....	[2]		.....do	4,342	General repairs to El Aguador, San Francisco, Calif.	
.....	[2]		.....do	6,500	Trip repairs to Sherman, San Francisco, Calif.	
.....	[2]		.....do	12,000	Trip repairs to Logan, San Francisco, Calif.	
.....	N. Y. Harbor & Dry Dock Corp.	Rosebank, Staten Island, N. Y	Mar. —, 1922	8,603	General repairs to Joseph Henry, Staten Island, N. Y.	40 days.
.....	Norfolk Shipbldg. & Dry Dock Corp.	Norfolk, Va	.....do	2,692	General repairs to Schofield, Norfolk, Va.	
.....	Morse Dry Dock & Repair Co.	Brooklyn, N. Y	Feb. —, 1922	264,935	Reconditioning U. S. Grant, Brooklyn, N. Y.	130 days.
.....	Calkins Dredging Co. (Inc.)	Norfolk, Va	Mar. 23, 1922	15,516	Dredging in Onancock River, Va	4 months.
.....	Chas. Hegewald Co	New Albany, Ind	Mar. 6, 1922	6,290	Furnishing and delivering one maneuver-boat hull.	100 days.
.....	Howard Shipyards & Dock Co.	Jeffersonville, Ind	Mar. 9, 1922	10,973	Constructing steel hull for U. S. S. Hyacinth.	2½ months.
.....	Rose Bros. Co. (Inc.)	Washington, D. C	.....do	140,100	Waterproofing reflecting pool in West Potomac Park, Washington, D. C.	8 months.
.....	Beaumont Shipbldg. & Dry Dock Co.	Beaumont, Tex	Mar. 18, 1922	25,000	Constructing three steel oil barges	80 days.

[1] Date of acceptance of proposal. [2] Not reported. [3] Estimated.

RECENT CONSTRUCTION CONTRACTS ENTERED INTO BY THE VARIOUS DEPARTMENTS OF THE UNITED STATES GOVERNMENT—Continued.

Department and contract number.	Contractor's— Name.	Address.	Contract. Date.	Amount.	Nature of contract.	Time limit.
War—Contd.						
.....	Pensacola Shipbuilding Co....	Pensacola, Fla.....	Mar. 20, 1922	$10,700	Constructing one steel oil barge.....	75 days.
.....	T. A. Scott Co. (Inc.).....	New London, Conn.....	Mar. 17, 1922	5,362	Dredging Silver Eel Pond, Fort H. G. Wright, N. Y., and Plum Gut Harbor, Fort Terry, N. Y.	Indefinite.
.....	Johnson Iron Works, Dry Dock & Shipbuilding Co. (Inc.).	New Orleans, La.....	Mar. 16, 1922	65,292	Construction and delivery of 6 steel barges.	90 days.
.....	Carson & Gruman Co.....	Washington, D. C.....	Mar. 11, 1922	10,265	Setting granite coping, reflecting pool, West Potomac Park, Washington, D. C.	2 months.
.....	Morse Dry Dock & Repair Co..	New York, N. Y.....	Feb. 21, 1922	265,000	Repairs to the transport Madawaska.....	
.....	(3).....	.....	(3)	200,000	General repairs to river, harbor, and Coast Artillery boats.	
.....	(3).....	.....	(3)	120,000	Repairs to two transports in the Atlantic service.	
.....	(3).....	.....	(3)	60,000	Repairs to one transport in the Pacific service.	
.....	(3).....	.....	(3)	700,000	Complete overhaul and repairs of transports Sherman and Logan in the Pacific service.	
.....	(3).....	.....	(3)	3,000	Danville, National Cemetery, raising roof of lodge and repairs.	
.....	(3).....	.....	(3)	1,650	Springfield, Mo., National Cemetery, extension of grounds.	
.....	(3).....	.....	(3)	1,790	Installation of proper lavatories, Richmond National Cemetery.	
.....	(3).....	.....	(3)	1,200	New flagstaff, Jefferson Barracks National Cemetery.	
.....	(3).....	.....	(3)	1,900	New flagstaff, addition to stable, Fayetteville, Ark., National Cemetery.	
.....	(3).....	.....	(3)	1,575	Repairs to inclosing wall, Chalmette, La., National Cemetery.	
.....	(3).....	.....	(3)	1,948	New cement drains, Knoxville, Tenn., National Cemetery.	
.....	(3).....	.....	(3)	1,975	New flagstaff, plumbing repairs, New Bern National Cemetery.	
.....	(3).....	.....	(3)	1,150	Repairs to drives, walks, and drains, Alexandria, La., National Cemetery.	
.....	(3).....	.....	(3)	9,500	Spray for trees and repair to roads, Arlington National Cemetery.	

.....	G. R. Abbott.....	3307 Bateman Ave., Baltimore, Md.	Feb. 14, 1922	10,390	Construction of incinerator, Edgewood Arsenal, Md.	May 15, 1922.
.....	Henry W. Horst Co.....	1417-1423 Second Ave., Rock Island, Ill.	Feb. 17, 1922	3,238	Rebuilding store house, Rock Island Arsenal, Rock Island, Ill.	Mar. 19, 1922.

.....	(1)	.....	(1)	9,500	Alexandria, La., National Cemetery. Spray for trees and repair to roads, Arlington National Cemetery.	
.....	G. R. Abbott	3307 Bateman Ave., Baltimore, Md.	Feb. 14, 1922	10,390	Construction of incinerator, Edgewood Arsenal, Md.	May 15, 1922.
.....	Henry W. Horst Co.	1417–1423 Second Ave., Rock Island, Ill.	Feb. 17, 1922	3,238	Rebuilding store house, Rock Island Arsenal, Rock Island, Ill.	Mar. 19, 1922.
Principal	Murch Bros. Construction Co ..	1856 Railway Exchange Bldg., St. Louis, Mo.	Mar. 6, 1922	13,000	Alterations to post hospital, Fort Leavenworth, Kans.	May 25, 1922.
Sub	Thalen Bros	Leavenworth, Kans	(1)	4,225	Plumbing and heating, Fort Leavenworth, Kans.	Do.
Sub	Rick Chapline Elec. Co	1515 Olive St., St. Louis, Mo	(1)	1,200	Electrical work, Fort Leavenworth, Kans.	Do.
Sub	Hewitt Painting Co	5091 Suburban tracks, St. Louis, Mo.	(1)	800	Painting, Fort Leavenworth, Kans	Do.
Sub	Ridde Rehbein Mfg. Co	13th and O'Fallon Sts., St. Louis, Mo.	(1)	900	Mill work, Fort Leavenworth, Kans	Do.
Sub	Missouri Mantel, Marble & Tile Co.	St. Joseph, Mo	(1)	1,030	Marble, Fort Leavenworth, Kans	Do.
Sub	H. G. Beard	1510 Drury Ave., Kansas City, Mo.	(1)	1,000	Plastering, Fort Leavenworth, Kans	Do.
Post Office.						
.....	Wm. E. Hooper & Sons Co	Baltimore, Md	.....	47,780	Making 58,333 E-1 mail sacks	June 30, 1922.
.....	.....do.....	.....do.....	.....	32,436	Making 33,333 No. 1 pouches	Do.
.....	.....do.....	.....do.....	.....	32,038	Making 32,206 No. 1 pouches	Do.
.....	.....do.....	.....do.....	.....	63,241	Making 83,333 No. 2 pouches	Do.
.....	.....do.....	.....do.....	.....	2,774	Making 25,291 E-0 mail sacks	Do
.....	.....do.....	.....do.....	.....	12,845	Making 116,667 E-1 mail sacks	Do.
.....	.....do.....	.....do.....	.....	9,970	Making 100,000 F-1 mail sacks	Do.
.....	.....do.....	.....do.....	.....	915	Making 25,000 F-2 mail sacks	Do.
.....	.....do.....	.....do.....	.....	8,280	Making 34,461 No. 1 pouches	Do.
.....	.....do.....	.....do.....	.....	17,191	Making 83,334 No. 2 pouches	Do.
.....	Hettrick Mfg. Co	Toledo, Ohio	.....	74,725	Making 350,000 D-2 mail sacks	Do.
Navy.						
4368	K. E. Parker Co	519 Calif. St., San Francisco, Calif..	Mar. 3, 1921	(1)	Storehouse foot of Broadway	
Sub	Western Art Stone Works	Los Angeles, Calif	Mar. 13, 1921	1,900	Artificial stone	
Sub	City Ornamental Iron Works ..	San Diego, Calif	.....do.....	1,475	Wrought-iron balustrade and pipe rail ..	
Sub	San Diego Planing Mill	.....do.....	.....do.....	1,640	Millwork	
Sub	William A. Butler	.....do.....	.....do.....	12,000	Brick and tile work	
Sub	Schrader Iron Works	San Francisco, Calif	.....do.....	2,000	Structural steel	
4527	Campbell Bldg Co	801 Newhouse Bldg., Salt Lake City, Utah.	Jan. 26, 1922	169,670	Post exchange and dispensary buildings, naval base (Marine Corps), San Diego, Calif.	165 days.
Sub	F. W. Spencer & Co	Salt Lake City, Utah	Feb. 7, 1922	19,210	Plumbing and heating	
Sub	Globe Electric Works	San Francisco, Calif	Feb. 17, 1922	5,250	Electrical work	
Sub	Friedman Lowith Iron Works.	Los Angeles, Calif	(1)	3,169	Miscellaneous iron and bronze	
Sub	Bennett-Montgomery Hardware Co.	.....do.....	Feb. 6, 1922	4,193	Hardware	

[1001]

[1] Not reported.

RECENT CONSTRUCTION CONTRACTS ENTERED INTO BY THE VARIOUS DEPARTMENTS OF THE UNITED STATES GOVERNMENT—Continued.

Department and contract number.	Contractor's— Name.	Address.	Contract. Date.	Amount.	Nature of contract.	Time limit.
Navy—Con.						
Sub	Truscon Steel Co	Washington, D. C	Jan. 31, 1922	$5,810	Reinforcing steel	
Sub	Novelty Sheet Metal Works	San Diego, Calif.	(1)	2,775	Flashing and sheet metal	
Sub	do	do	(1)	3,765	Tile roofing	
Sub	Glasson Planing Mill	do	Mar. 2, 1922	10,100	Millwork	
Sub	William Smith	Pasadena, Calif.	Mar. 4, 1922	1,250	Concrete stone	
4504	W. F. Martens	53 Franklin St., Rochester, N. Y.	Dec. 24, 1921	(1)	Building storehouse, Pearl Harbor, Hawaii.	
Sub	Brighton Plumbing, Heating & Electric Co.	Rochester, N. Y.	(2)	(2)	Plumbing and electrical work	
4556	Henry McGee	208 Northern Life Bldg., Seattle, Wash.	Jan. 25, 1922	637,724	Rebuilding and extending Pier No. 5, Puget Sound, Wash.	Contract period, Mar. 4, 1922, to Feb. 27, 1923.
Sub	C. O. Larsen	Seattle, Wash.	Mar. 2, 1922	21,500	Reinforcing steel	
4557	Shevlin Engineering Co.	110 W. 34th St., New York, N. Y.	(2)	9,997	Piping for air compressor, Charleston, S. C., navy yard.	90 calendar days.
4570	General Electric Co.	Schenectady, N. Y.	(2)	16,860	Motor generator set switchboard, naval operating base, Hampton Roads, Va.	180 calendar days.
4543	Wittenmeier Machinery Co.	850 N. Spaulding Ave., Chicago, Ill.	(2)	29,970	Refrigerating and cold-storage plant, naval base, San Diego, Calif.	90 calendar days.
4569	Doullut & Williams Co. (Inc.).	816 Howard Ave., New Orleans, La.	(2)	32,275	Timber bridge at naval air station, Pensacola, Fla.	120 calendar days.
4562	J. A. McEachern Co.	552 Colman Building, Seattle, Wash.	(2)	300,000	Sea wall, navy yard, Puget Sound, Wash.	360 calendar days.
4572	H. M. Lucas	115 Maple St., Portsmouth, Va.	(2)	2,868	Building carriage house, navy yard (Marine Barracks), Norfolk, Va.	45 calendar days.
4580	Charles Gilpin	911 Harrison Bldg., Philadelphia, Pa.	(2)	19,295	Storeroom for gas cells, Naval Air Station, Lakehurst, N. J.	60 calendar days.
4564	Parker & Wood	Bremerton, Wash.	(2)	17,750	Extension to shell house, Naval Ammunition Depot, Puget Sound, Wash.	90 calendar days.
4568	W. F. Martens	53 Franklin St., Rochester, N. Y.	(2)	13,848	Barracks Building, Radio Compass Station, Fourth Cliff, Scituate, Mass.	160 calendar days.
4573	Newport Contracting & Engineering Co.	Law Bldg., Newport News, Va.	(2)	6,662	Steam piping systems Navy Mine Depot, Yorktown, Va.	90 calendar days.
4574	Bert Ward	418 People's Bank Bldg., Seattle, Wash.	(2)	14,880	Operating and Power Building, cisterns, walks, sewer, and water systems, Naval Radio Station, Tatoosh Island, Wash.	Do.
Interior.						
	Edward Lembke	Albuquerque, N. Mex.	Mar. 21, 1922	1,020	Addition to shop building	30 days.

Agriculture.						
Alabama: 104-B	Etowah Co.	Gadsden, Ala.	Mar. 31, 1922	25,668	Concrete bridge and approach, Etowah County.	
85	Southern Roads Co.	Birmingham, Ala.	do	5,211	Floor for bridge, Elmore County.	

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Agriculture.

Alabama:					
104-B	Etowah Co.	Gadsden, Ala	Mar. 31, 1922	25,668	Concrete bridge and approach, Etowah County.
85	Southern Roads Co.	Birmingham, Ala	do	5,211	Floor for bridge, Elmore County
66	Gibson Construction Co	Knoxville, Tenn	Mar. 29, 1922	165,575	Road, gravel, Lauderdale County
75	E. P. Toulmin	Mobile, Ala	Mar. 21, 1922	134,398	Road, gravel, Wilcox County
77	O. H. Mann & Co	La Grange, Ga	Mar. 28, 1922	44,813	Road, top soil, Chambers County
82	Texas Roads Co.	Dallas, Tex	Mar. 21, 1922	186,899	Road, bitumen-concrete, Cullman County.
83	do.	do.	do.	227,621	Road, bitumen-concrete, Morgan County.
86	Henderson & Smith	Montgomery, Ala	do.	77,273	Road, gravel, Elmore County
86			do.	30,108	Bridge, Elmore County
87			Mar. 28, 1922	426,840	Road, plain concrete, Limestone County.
87			do.	384,101	Road, bitumen macadam top, Limestone County.
88	W. T. Taylor Construction Co.	Wilsonville, Ala	Mar. 21, 1922	382,993	Road, bitumen-macadam, Marshall County.
89	Lawrence, Nixon & Phillips	Jackson, Miss	Mar. 29, 1922	36,632	Road, sand, clay, Geneva County
91	J. R. & J. B. Miller	Baconton, Ga	Mar. 28, 1922	[2]	Road, sand, clay, Coffee County
96	Keyser & Gillis	Monroeville, Ala	Mar. 21, 1922	137,406	Road, gravel, Escambia County
109-B	Dale County	Ozark, Ala	Mar. 29, 1922	41,964	Road, sand, clay, Dale County
Delaware:					
12	Harrison Engr. & Constr. Corp.[1]	Buffalo, N. Y	do	171,913	Road, plain concrete, Kent County
13	do.[1]	do.	do.	191,203	do.
Georgia 240	A. J. Glover [1]	Macon, Ga	Apr. 4, 1922	12,992	Bridge, Laurens County
Kansas 109-A	Davidson Construction Co.	2958 E. 30th St., Kansas City, Mo.	do.	58,989	Road, graded and drained, Linn County.
Missouri:					
50	W. R. Larson Construction Co.	Sioux Falls, S. Dak	Mar. 30, 1922	40,309	Road, graded and drained, Harrison County.
87	Carterville Construction Co.	Carterville, Mo.	Mar. 4, 1922	88,735	Road, plain concrete, Henry County.
105-A	Lynch, McDonald Construction Co.	Moberly, Mo	Mar. 3, 1922	65,560	Road, gravel, Iron County
105-B	do.	do.	do.	76,598	do.
105-C	Service Construction Co.	Poplar Bluff, Mo.	do.	27,113	do.
111-B	Alexander & Baity	Springfield, Mo.	Mar. 28, 1922	53,116	Road, graded and drained, Ozark County.
118-A	Vincennes Bridge Co.	Vincennes, Ind.	Mar. 7, 1922	25,147	Bridge, Stoddard County
118-A	Mississippi-Arkansas Truck Co.	Searcy, Ark	do.	35,495	Road, gravel, Stoddard County
128	Maxwell Construction Co.	Columbus, Kans	Mar. 4, 1922	[2]	Road, graded and drained, Henry County.
161-D	Short & Bramer	Monette, Mo.	Mar. 17, 1922	30,022	Bridge, Stone County
161-D	Oberlander Bros.	Mixa, Mo.	do.	22,837	Road, graded and drained, Stone County.
169	Easley Bros.	Aurora, Mo.	Mar. 23, 1922	18,879	Road, graded and drained, Jasper County.

[2] Not reported.

[1] Not yet awarded.

RECENT CONSTRUCTION CONTRACTS ENTERED INTO BY THE VARIOUS DEPARTMENTS OF THE UNITED STATES GOVERNMENT—Concluded.

Department and contract number.	Contractor's—		Contract.		Nature of contract.	Time limit.
	Name.	Address.	Date.	Amount.		
Agriculture—Concluded.						
Tennessee:						
21	Hughey Bros. Co.	Memphis, Tenn.	Mar. 31, 1922	(2)	Road, bitumen-macadam, Carroll County.	
27	Moore Construction Co.	Columbia, Tenn.	do.	$63,058	Road, gravel, Lewis County.	
72	Estes, Williams, Ragsdale Co.	Memphis, Tenn.	do.	24,550	Bridge, Marion County.	
Virginia 150	Atlantic Bridge Co.	Roanoke, Va.	Apr. 4, 1922	74,713	Bridge, Elizabeth City.	
W. Virginia:						
4	Cisler & Morse	Marietta, Ohio	do.	56,475	Road, plain concrete, Marion County.	
32	do.	do.	do.	105,953	Road, plain concrete, Roane County.	
113	do.	do.	do.	179,983	Road, plain concrete, Monongahela County.	
114	do.	do.	do.	125,702	do.	
115	All bids rejected.		do.	(2)	Road, bitumen-macadam, Berkeley County.	
115	Vincennes Bridge Co.	Vincennes, Ind.	do.	4,095	Bridge, Berkeley County.	
118	Paul S. Horner & Co.	Clarksburg, W. Va.	do.	12,200	Road, bitumen-macadam, Harrison County.	
118	Walter S. Rae	Pittsburgh, Pa.	do.	26,718	Bridge, Harrison County.	
119	Smith & Qaynne	Parkersburg, W. Va.	do.	170,336	Road, bitumen-concrete, Ritchie County.	
118	Sutter, Cooper & Faye	Aspinwall, Pa.	do.	24,547	Bridge, Harrison County.	
119	E. P. Cokeley	Harrisville, W. Va.	do.	16,540	Bridge, Ritchie County.	
120	Engstrom & Knapp	Wheeling, W. Va.	do.	66,250	Road, plain concrete, Ohio County.	
Wisconsin:						
264	Foresyth Construction Co.	Cameron, Wis.	do.	11,370	Bridge, Barron County.	
180	Jones & Hughes	Dodgeville, Wis.	Apr. 5, 1922	23,258	Road, graded and drained, Iowa County.	

2 Not reported.

Part-time Employment in New York Factories, December, 1921.[1]

THE New York State Department of Labor conducted a special investigation in December, 1921, of part-time employment and standard working hours. Reports were received from 1,320 firms employing over 300,000 persons. The accompanying table gives some of the results of this inquiry.

The findings of the investigation would seem to lead to the conclusion that underemployment in December was slight in comparison to the dislocation produced by the dismissal of workers. An employee dropped from the pay roll reduces the total amount of employment as much as six workers who lose one day each. The actual working hours, however, frequently exceed the standard week. In numerous industries the amount of overtime is usually considerable and was very large previous to the present depression. In most cases employers cut down the working time when they regard poor business conditions as temporary and desire to keep their labor force together. On the other hand, workers are generally dropped entirely when employers are looking forward to protracted and complete readjustments.

The questionnaires used in the investigation contained inquiries relative to standard hours worked by both men and women in the week including December 15. "The actual hours worked were reduced to equivalent days on the basis of the standard hours as given for each factory."

Some of the part-time employees included in the tabulation lost time because of personal matters and the overtime workers include some whose occupations involved a longer workday than that reported for the regular shop workers. In certain industries overtime was increased by the demands of the Christmas market. The above table shows therefore more overtime and part-time work than can be ascribed solely to the general industrial situation.

The investigation disclosed a definite trend toward a shorter standard working week and a "marked extension" of the eight-hour day.

[1] The Industrial Bulletin. Issued by the Industrial Commissioner of New York State. Albany, January and February, 1922.

TIME WORKED BY EMPLOYEES OF REPRESENTATIVE FACTORIES IN NEW YORK STATE DURING ONE WEEK OF DECEMBER, 1921.[1]

Industry.	Number of reports.	Men.						Women.					
		Total.	Number working—					Total.	Number working—				
			Overtime.	Full time.	5 days.	4 days.	3 days or less.		Overtime.	Full time.	5 days.	4 days.	3 days or less.
Stone, clay, and glass products	56	8,139	1,208	4,891	1,149	395	496	868	6	693	99	39	31
Metals, machinery, and conveyances	295	97,772	8,304	58,201	17,719	7,460	6,088	6,288	309	3,233	1,221	1,116	409
Wood manufactures	115	15,220	1,593	10,227	2,026	486	888	1,746	71	1,261	300	46	68
Furs, leather, and rubber goods	113	12,180	515	7,882	2,363	749	671	4,610	67	2,660	1,175	474	234
Chemicals, oils, paints, etc	51	12,246	1,773	8,095	1,793	235	350	2,564	135	1,623	590	87	129
Paper	22	5,947	2,012	2,835	749	131	200	243	48	83	104	4	4
Printing and paper goods	107	15,347	2,351	10,726	1,483	326	461	7,028	344	5,257	877	300	250
Textiles	139	24,818	2,781	18,850	1,740	636	811	23,503	303	18,469	2,366	981	1,384
Clothing, millinery, laundering, etc	284	20,656	1,684	17,309	732	472	459	24,157	482	18,762	2,656	1,272	985
Food, beverages, and tobacco	128	18,463	1,061	13,208	2,169	1,243	782	8,638	54	5,684	2,042	340	518
Water, light, and power	10	2,731	252	2,245	221	10	3	3			3		
Total	1,320	233,519	23,534	154,469	32,144	12,163	11,209	79,648	1,819	57,725	11,433	4,659	4,012

Industry.	Total—men and women.											
	Total.	Number working—					Total.	Per cent working—				
		Overtime.	Full time.	5 days.	4 days.	3 days or less.		Overtime.	Full time.	5 days.	4 days.	3 days or less.
Stone, clay, and glass products	9,007	1,214	5,584	1,248	434	527	100.0	13.4	62.0	13.9	4.8	5.9
Metals, machinery, and conveyances	104,060	8,613	61,434	18,940	8,576	6,497	100.0	8.3	59.0	18.2	8.2	6.3
Wood manufactures	16,966	1,664	11,488	2,326	532	956	100.0	9.9	67.7	13.7	3.1	5.6
Furs, leather, and rubber goods	16,790	582	10,542	3,538	1,223	905	100.0	3.4	62.8	21.1	7.3	5.4
Chemicals, oils, paints, etc	14,810	1,908	9,718	2,383	322	479	100.0	12.9	65.6	16.1	2.2	3.2
Paper	6,190	2,060	2,918	853	155	204	100.0	33.3	47.1	13.8	2.5	3.3
Printing and paper goods	22,375	2,695	15,983	2,360	626	711	100.0	12.0	71.4	10.6	2.8	3.2
Textiles	48,321	3,084	37,319	4,106	1,617	2,195	100.0	6.4	77.2	8.5	3.3	4.6
Clothing, millinery, laundering, etc	44,813	2,166	36,071	3,388	1,744	1,444	100.0	4.8	80.5	7.6	3.9	3.2
Food, beverages, and tobacco	27,101	1,115	18,892	4,211	1,583	1,300	100.0	4.1	69.7	15.5	5.9	4.8
Water, light, and power	2,734	252	2,245	224	10	3	100.0	9.2	82.1	8.2	.4	.1
Total	313,167	25,353	212,194	43,577	16,822	15,221	100.0	8.1	67.8	13.9	5.4	4.8

[1] Most reports covered week ending December 17, 1921.

Recent Statistics of Employment.

California.

THE Bureau of Labor Statistics of California, in cooperation with the United States Department of Labor Employment Service, in its Bulletin No. 4, presents the results of a survey of employment in the manufacturing industries of that State. The bulletin shows the changes in the principal industries from December, 1921, to February, 1922.

Questionnaires were sent out by the bureau to 550 manufacturing establishments, of which number 407 furnished answers. These 407 firms employ 30 per cent of the wage earners in the manufacturing industries of California. The tabulated returns are here given:

NUMBER EMPLOYED IN SPECIFIED INDUSTRIES AND LOCALITIES IN DECEMBER, 1921, AND JANUARY AND FEBRUARY, 1922, AND PER CENT OF CHANGE IN FEBRUARY, 1922.

Industry or locality.	Number of establishments reporting.	Number at work—			Per cent of increase (+) or decrease (−) in February, 1922, as compared with—	
		Dec., 1921.	Jan., 1922.	Feb., 1922.	Dec., 1921.	Jan., 1922.
Industry:						
Canning, drying, and preserving	33	1,543	1,315	1,343	−13.0	+2.1
Bakery products	11	1,138	1,136	1,181	+3.8	+4.0
Confectionery	14	1,462	1,436	1,444	−1.2	+.6
Flour and grist mills	8	1,190	1,111	1,155	−3.0	+4.0
Sugar	6	1,189	2,125	2,193	+84.4	+3.2
Slaughtering and packing	9	2,499	2,578	2,524	+1.0	−2.1
Other kindred food products	3	216	219	221	+2.4	+1.0
Textiles and products	23	3,139	3,244	3,288	+4.7	+1.4
Agricultural implements (including tractors)	4	304	321	404	+32.6	+25.9
Gas engines, pumps, boilers	15	1,390	1,347	1,416	+1.9	+5.1
Structural and ornamental steel	4	265	291	313	+18.1	+7.6
Iron and steel forgings	7	1,746	1,490	1,773	+1.5	+19.0
Shipbuilding (including naval repairs)	10	9,639	8,659	8,222	−14.7	−5.0
Foundry and machine shops, not otherwise classified	27	1,639	1,993	2,077	+26.7	+4.2
Tin cans	6	742	1,168	1,399	+88.6	+19.8
Other metal products, not otherwise classified	7	676	636	652	−3.5	+2.5
Sawmills and logging camps	20	6,461	6,460	6,330	−2.0	−2.0
Planing mills, box factories, etc.	25	6,264	5,650	5,821	−7.1	+3.0
Other lumber products	12	972	982	963	−1.0	−2.0
Tanning and wool scouring	9	982	1,011	1,023	+4.2	+1.2
Finished leather products	5	632	587	579	−7.1	−1.4
Paper bags, boxes, etc.	8	677	680	679	.....	.....
Printing and publishing	11	1,397	1,273	1,206	−13.7	−5.3
Other paper products	8	1,192	1,176	1,161	−2.6	−1.3
Liquor, beverages, and ice	7	387	366	378	−2.3	+3.3
Explosives	4	503	504	501	.....	.....
Mineral oil refining	5	3,314	3,573	3,876	+17.0	+8.5
Other chemical products	16	1,752	1,758	1,822	+4.0	+3.6
Cement	5	1,051	1,080	1,149	+9.3	+6.4
Glass (including bottles)	3	756	848	878	+16.1	+3.5
Brick, stone, and clay products	15	2,108	2,245	2,271	+7.7	+1.2
Tobacco products	7	1,379	1,454	1,524	+10.5	+4.8
Wagons and autos (including bodies)	6	917	1,071	1,138	+24.1	+6.3
Railroad repair shops	20	12,336	11,308	11,388	−7.7	+.7
Laundries	23	2,252	2,232	2,240	−.5	+.4
Miscellaneous industries	11	3,247	3,332	3,533	+8.8	+6.0
Total	407	77,356	76,659	78,065	.....	.....
Locality:						
San Francisco	110	15,710	16,498	16,621	+5.8	+.7
Los Angeles	83	16,540	16,371	16,744	+1.2	+2.3
Oakland [1]	38	7,802	7,355	7,516	−3.7	+2.2
Balance of State	176	37,304	36,435	37,184	−.3	+2.1
Total	407	77,356	76,659	78,065	+.9	+1.8

[1] Includes Emeryville, Alameda, and Berkeley.

[1] Most reports covered week ending December 17, 1921.

Illinois.

THE Illinois Department of Labor, in its Employment Bulletin for March, 1922, gives figures showing changes in employment in 903 identical establishments in February, 1922, as compared with May, 1921, and January, 1922. These figures are shown in the following table:

NUMBER EMPLOYED IN SPECIFIED INDUSTRIES ON FEBRUARY 28, 1922, AND PER CENT OF CHANGE AS COMPARED WITH MAY 31, 1921, AND JANUARY 31, 1922.

Industry.	Number of establishments reporting.	Number employed Feb. 28, 1922.	Per cent of increase (+) or decrease (−) Feb. 28, 1922, compared with—	
			May 31, 1921.	Jan. 31, 1922.
Stone, clay, and glass products	58	7,340	+0.6	+4.6
Metals, machinery, and conveyances	341	122,202	+9.9	+1.6
Wood manufacturing	79	8,671	+30.1	−1.6
Furs, leather, and rubber goods	39	11,010	+27.5	−.6
Chemicals, oils, and paints	40	6,322	+19.1	+1.8
Paper	4	137	+44.4	+3.0
Printing and paper goods	53	8,277	+31.6	−4.8
Textiles	25	5,433	−10.6	−3.8
Clothing, millinery, and laundry	52	37,384	+1.3	−1.8
Food, beverages, and tobacco	102	40,854	−10.2	−2.4
Public utilities and railroads	10	50,548	−3.6	−.4
Mining	18	8,278	+65.7	+.4
Building and contracting	82	3,242	+5.8	+32.3
Total	903	309,698	+5.7	+.15

Iowa.

FIGURES issued by the Iowa State Bureau of Labor Statistics in a press release dated March 23, 1922, show the number of persons employed by 321 identical firms in Iowa in February and March, 1922. Reports have, in some months, been received from as many as 371 firms. Some firms fail to report for some months, however, and in order to make comparison between two successive months the bureau has adopted the plan of showing figures for only those firms which made a report in both months. Information for February and March is given in the table below:

NUMBER OF PERSONS EMPLOYED IN 321 IDENTICAL ESTABLISHMENTS IN JANUARY AND FEBRUARY, 1922, AND NUMBER OF ESTABLISHMENTS OPERATING FULL TIME, OR PART TIME, OR CLOSED DOWN.

Industry.	Number of establishments reporting.	Number employed in—		Per cent of increase.	Number of establishments—		
		February, 1922.	March, 1922.		Operating full time.	Operating part time.	Closed down.
Food and kindred products	63	11,900	11,436	[1] 4.0	39	20	4
Textiles and clothing	26	2,506	2,525	.7	21	4	1
Iron and steel	67	5,450	6,089	11.7	39	26	2
Lumber products	33	3,732	3,786	1.4	23	9	1
Leather products	9	518	543	4.8	8	1	.....
Paper and printing	27	2,501	2,482	37.3	25	1	1
Medicines, chemicals, etc	7	221	239	8.1	7	.....	.....
Stone and clay products	31	1,842	2,652	44.0	15	5	11
Tobacco	7	582	527	[1] 9.5	2	5	.....
Car shops	5	4,288	5,179	19.3	3	2	.....
Miscellaneous	46	8,819	9,009	2.1	42	4	.....
Total	321	42,369	44,407	4.8	224	77	20

[1] Decrease.

Massachusetts.[1]

THE Massachusetts Department of Labor and Industries in cooperation with the United States Employment Service has made an employment survey in representative establishments in 8 cities of the State, i. e., Boston, Brockton, Fall River, Lawrence, Lowell, New Bedford, Springfield, and Worcester. Data as to the number employed in 192 identical establishments (each normally employing more than 500 persons) were secured from the last pay rolls in February, 1922. The following table shows how these data compare with corresponding monthly data for 1921 and January, 1922:

NUMBER EMPLOYED IN 192 IDENTICAL MANUFACTURING ESTABLISHMENTS IN 8 MASSACHUSETTS CITIES IN 1921 AND FEBRUARY, 1922, BY MONTHS.

Year and month.[1]	Number on pay roll.
1921.	
January	192,871
February	195,147
March	193,105
April	191,759
May	194,687
June	195,420
July	198,103
August	195,545
September	197,123
October	198,515
November	198,370
December	199,980
Monthly average, 1921	195,885
1922.	
January	200,716
February	198,127

[1] Last pay roll of each month.

The number employed at the end of February, 1922, was approximately 1 per cent less than the corresponding number at the end of January, 1922. This was due almost entirely to decreased employment in the textile cities—Lowell, Lawrence, Fall River, and New Bedford. There was a slight reduction in the number employed in Boston, but in Brockton (mainly in boot and shoe manufacturing) and in Springfield and Worcester (in both chiefly in the metal trades) there were increases in the number employed in the establishments covered.

State Employment Offices.

In February, 1922, the persons placed by four[2] Massachusetts public employment offices (the Boston, mercantile, Springfield, and Worcester) numbered 2,360, which was an increase of 245, or 11.6 per cent, over the number (2,115) placed by these offices in January, 1922, and an increase of 417, or 22.0 per cent over the number (1,943) which three offices placed in February, 1921. At the four offices, in February, 1922, employers called for 2,969 persons, 9.7 per cent over the number (2,706) called for by employers in these offices in the preceding month. These increases are regarded as indicative

[1] Typewritten report from the Massachusetts Department of Labor and Industries.
[2] A mercantile branch of the Boston office was opened on January 9, 1922.

that "conditions in the labor market are improving steadily." According to the records of the new mercantile office, in the first 43 office days of its operation (January 9 to February 28) 207 persons were called for by employers and 139 persons were placed.

New York.

A STATEMENT issued by the New York State Department of Labor, based on reports from 1,562 representative manufacturing establishments employing more than 450,000 workers, shows that the number employed in March increased 1 per cent over February. This gain is attributed to the improvement in business conditions in general and to increased seasonal activity in a number of industries.

Substantial increases were reported in the stone and clay products group of industries (with the exception of the glass industry which reported a decrease), the sawmill and planing mill products group, and the foods and beverages group.

Gains in employment occurred in the iron and steel industry, and in the manufacture of sheet metal, machinery, instruments, and appliances, cutlery, rubber goods, miscellaneous leather goods, furs, paper boxes, millinery, women's clothing, knit goods, and miscellaneous chemical products.

Although the automobile industry showed a gain in employment, this was due chiefly to increases in the force in factories making lower-priced cars and auto parts. The manufacturers of higher-priced cars reported reductions in the number of employees.

Decreases in employment occurred in the railway repair and equipment industry, and in the silverware and jewelry, leather tanning, boot and shoe, paper, men's clothing, cotton goods, miscellaneous textiles, and oil products industries.

No change took place in the printing, miscellaneous paper goods, or paints and dyes industries.

Wisconsin.[1]

THE activities of the 11 free employment offices of Wisconsin in January and February, 1922, and February, 1921, are shown in the following tabular statement:

ACTIVITIES OF WISCONSIN EMPLOYMENT OFFICES IN FEBRUARY, 1921, AND JANUARY AND FEBRUARY, 1822.

Month.	Registrations.	Orders.	Referred to positions.	Verified placements.
February, 1922	7,715	5,781	5,917	4,275
January, 1922	7,773	5,217	5,535	4,299
February, 1921	5,975	4,865	4,621	3,494

[1] Data are taken from progress report for February, 1922, of Industrial Commission of Wisconsin.

Unemployment in Foreign Countries.

SINCE the last publication in the MONTHLY LABOR REVIEW of data on unemployment in foreign countries (April, 1922, pp. 146 to 151), the situation as regards the state of employment has shown signs of improvement in Great Britain, France, Belgium, and Canada. In Germany, Italy, Switzerland, the Scandinavian countries, Austria, and Finland unemployment has increased.

Briefly summarized, the situation in the individual countries at the latest date for which data are available was as follows:

Great Britain.—Employment continued bad during February, but showed a slight improvement as compared with January. The industries in which the improvement was most noticeable were coal mining, pig-iron manufacture, iron and steel manufacture, the woolen and worsted industry, the ready-made clothing industry, boot and shoe manufacture, and the pottery trade. In the engineering trades and in the shipbuilding and ship repairing trades employment remained very bad. In the textile industries, with the exception of the woolen and worsted industries, employment continued bad generally, with much unemployment and short-time working. In the building trades employment showed a slight improvement, but continued slack on the whole. Among dock laborers employment continued slack generally. With seamen it was also slack, but among fishermen employment showed an improvement, and was on the whole fair. In agriculture the supply of labor was generally in excess of the demand, but unemployment was largely confined to unskilled workers.

Germany.—The March 15, 1922, issue of the Reichs-Arbeitsblatt, in its summary statement concerning the labor market in February, says: "The depreciation of the mark, the further increase in the cost of living and of prices of raw materials and manufactured goods, as well as of all other manufacturing costs, wages, freight rates, etc., continued during February. Fears that prices would rise still more in the near future brought considerable new orders to many industry groups. Employment in industry therefore continued good. Employment was temporarily slack during the railroad strike, which lasted, however, only one week. Frost combined with the railroad strike caused an increase in the number of unemployed during the first two weeks of the month under review. Milder weather during the second half of the month permitted, however, the resumption of outdoor and emergency work."

France.—The scanty official data published on employment indicate a slight decrease during March in the number of unemployed persons receiving unemployment benefits and in the number of applicants for employment at public employment exchanges. The figures given in this respect are, however, no true index of the state of employment. It may, however, be safely stated that employment is normal in France.

Italy.—The unemployment situation is becoming more alarming from month to month. The latest official statistics, which relate to January 1, 1922, show a further considerable increase in the number of totally unemployed, as compared with the preceding month. The number of short-time workers decreased slightly. The increase in

the number of totally unemployed to 541,775 on January 1, 1922, as compared with 512,600 on December 1, 1921, is largely ascribed to the season, the largest increases having been reported in agriculture, fishing, mining, the building trades, and construction work. Slight decreases in unemployment were reported by the metal working and machinery, textile, and chemical industries.

Switzerland.—This is another country in which unemployment has steadily increased from month to month since the end of 1920. On December 31, 1920, the number of totally unemployed was 17,623; by the end of February, 1921, it had risen to 42,705, and by the end of February, 1922, to 99,541. On the last-named date the following occupational and industry groups showed the largest increases in unemployment: Unskilled workers (1,925), textile industries (590), foodstuff industries (459), agriculture and gardening (267). Decreases in unemployment were reported by the watch industry (659), the clothing industry (208), and the building trades (158).

Owing to generous appropriations for productive unemployment relief work by the Federal and cantonal Governments, a larger number of people out of work could be given employment in February at emergency public works. Inclusive of 1,574 men employed in the Canton Zurich at subsidized housing work, a total of 24,253 persons were employed in February at emergency public works, as against 19,662 in January.

Sweden.—Unemployment is constantly growing more serious and is the Government's most perplexing problem. The most vexing question is to whom to grant monetary unemployment relief. There is a deadlock between employers' and labor organizations in the matter of collective agreements, the employers having refused to renew collective agreements. Since 1915 there has been a rule that any who can not secure work at the rate of wages fixed in existing collective agreements for the kind of work in question shall be considered as involuntarily unemployed and entitled to monetary unemployment relief. As no collective agreements are in force now the rule has been changed and at present an unemployed person is considered involuntarily unemployed if he refuses to accept work at unreasonably low wages. No unemployment relief is to be granted to any workman directly taking part in a strike.

Norway.—The latest reports of unemployment show that the number of totally unemployed is growing. The per cent of trade-union members out of work and the number of applicants on the live register of employment exchanges has also been rising.

Denmark.—The number of totally unemployed had grown to 102,340 by February 25, 1922, as compared with 89,690 on January 28. The unemployment situation is being greatly aggravated by the general lockout still in force. This lockout is due to the refusal of the Danish Employers' Association to renew collective agreements stipulating the eight-hour day.

Austria.—The industrial crisis in Austria is taking on greater proportions every day. The number of unemployed in Austria was 80,000 on March 10, 1922, while a year ago it was only 25,000. Dismissals of employees have been most numerous in the metal, electrical, furniture, shoe, textile, and automobile industries, the stagnation in these industries being very serious.

Canada.—The curve of employment based on employers' returns showed an upward tendency during February. The downward movement manifested in the latter part of January was not continued during February and a considerable increase in activity was registered. Employment was, however, still much below the level of last year. Increased activity was reported in the leather, water transportation, metallic ores, street railway, textile, rubber, lumber, and edible plant products groups. On the other hand reduction in operations were reported in the iron and steel, clay, glass, and stone, pulp and paper, nonferrous metal, railway construction, railway transportation, and wholesale trade divisions.

A summary of the latest statistical reports on unemployment in foreign countries is given in the following table:

SUMMARY OF LATEST REPORTS ON UNEMPLOYMENT IN FOREIGN COUNTRIES.

Country.	Date.	Number or per cent of unemployed.	Source of data.	Remarks.
Great Britain	Feb. 21, 1922	1,868,223 (number of unemployment books lodged), representing 15.7 per cent of all persons insured against unemployment.	Labor Gazette, March, 1922	Of the 1,868,223 persons having lodged their unemployment books, 1,501,150 were males and 367,073 were females. In addition, 266,162 insured persons (156,501 males and 109,661 females), or 2.2 per cent of all insured persons, were systematic short-time workers and entitled to out-of-work donation. The per cent of totally unemployed on Jan. 31, 1922, was 16.2 and that of short-time workers 2.4.
	Feb. 28, 1922	16.3 per cent of trade-union members	do	The per cent of unemployed trade-union members was 16.8 at the end of January, 1922, and 8.5 at the end of February, 1921.
Germany	Feb. 1, 1922	196,103 received unemployment donations.	Reichs-Arbeitsblatt, Feb. 28, 1922	Of the 196,103 persons receiving unemployment donations, 164,450 were males and 31,653 were females. On Jan. 1, 1922, the total number was 164,958.
	Jan. 28, 1922	3.3 per cent of trade-union members	do	The per cent of unemployed trade-union members was 1.6 at the end of the last week of December, 1921, and 4.5 at the end of January, 1921.
France	Mar. 17, 1922	8,875 persons in receipt of unemployment benefits from departmental and municipal unemployment funds.	Bulletin du Marché du Travail, Mar. 18, 1922.	Of the 8,875 persons in receipt of unemployment benefits, 7,269 were males and 1,606 were females. At the end of the preceding week the number of persons receiving unemployment benefits was 9,345.
	Mar. 11, 1922	17,786 persons on the live register of employment exchanges.	do	Of the 17,786 persons on the live register of employment exchanges, 12,546 were males and 5,240 were females.
Italy	Jan. 1, 1922	541,779 persons totally unemployed, 178,662 partially unemployed.	British Labor Gazette, March, 1922	The corresponding figures for Dec. 1, 1921, were 512,260 totally unemployed and 181,002 partially unemployed.
	do	116,200 persons in receipt of unemployment allowances.	do	Of the 116,200 in receipt of unemployment allowances, 71,917 received allowances under the compulsory insurance scheme and 44,283 under the provisional unemployment relief scheme. The totally unemployed receiving no allowance at all, therefore, numbered 425,579.
Belgium	Dec. —, 1921	86,083 members of unemployment funds, or 11.4 per cent of the total membership, were either out of work or on short time.	Revue du Travail, February, 1922	The corresponding per cent for November, 1921, was 13.9. The aggregate days of unemployment in December numbered 1,477,066, as compared with 1,511,527 in November.
	Jan. —, 1922	18,183 applications for employment at public employment exchanges.	do	The number of applicants for work in December was 15,165. For every 100 vacant situations there were 196 applicants in January, as against 186 in December.
Switzerland	Feb. 28, 1922	99,541 totally unemployed; 46,761 short-time workers.	Der Schweizerische Arbeitsmarkt, Mar. 15, 1922.	The corresponding figures for Jan. 31, 1922, were 97,091 totally unemployed and 49,181 short-time workers. As totally unemployed there were counted in January, 19,662 and in February 22,679 persons employed on emergency public works.
	Feb. —, 1922	72,230 applications for employment at public employment exchanges.	do	The corresponding number in January, 1922, was 72,467. Per 100 vacant situations there were 897 male and 465 female applicants in February, 1922. The corresponding figures for January, 1922, were 956 and 437.
	Feb. 28, 1922	56,057 persons received unemployment donations.	do	The corresponding number on Jan. 31, 1922, was 53,772.
Denmark	Feb. 25, 1922	102,340 totally unemployed	British Labor Gazette, March, 1922	Of the 102,340 unemployed, 41,080 were in Copenhagen, 26,267 in the islands, and 34,993 in Jutland. On Jan. 28, 1922, the total number of unemployed was 89,690.
Norway	Feb. 10, 1922	47,200 totally unemployed	do	The corresponding number on Jan. 10, 1922, was 41,500.

Denmark	Feb. 25, 1922	102,340 totally unemployed	British Labor Gazette, March, 1922	Of the 102,340 unemployed, 41,080 were in Copenhagen, 26,267 in the islands, and 34,993 in Jutland. On Jan. 28, 1922, the total number of unemployed was 89,690.
Norway	Feb. 10, 1922	47,200 totally unemployed	do	The corresponding number on Jan. 10, 1922, was 41,500.
	do	30,384 persons on the live register of employment exchanges.	do	The corresponding number a year ago was 14,832.
	Dec. 31, 1921	18.3 per cent of trade-union members	do	The corresponding per cent on Nov. 30, 1921, was 16.9 and on Dec. 31, 1920, 6.5.
Sweden	do	140,883 unemployed	do	The corresponding number on Nov. 30, 1921, was 117,000. On Dec. 31, 1921, the total number of persons employed on relief works was 10,828, and the total in receipt of monetary relief was 47,795.
	do	33.2 per cent of trade-union members	Sociala Meddelanden, No. 3, 1922	The corresponding per cent at the end of November, 1921, was 28.8 and 15.6 at the end of December, 1920.
Austria	Mar. 10, 1922	80,000 unemployed	Neues Wiener Tagblatt, Mar. 10, 1922.	The corresponding number a year ago was 25,000.
Finland	Jan. 31, 1922	3,571 unemployed	British Labor Gazette, March, 1922	The corresponding number on Dec. 31, 1921, was 2,127 and on Jan. 31, 1921, 3,373.
Canada	Feb. 1, 1922	13.9 per cent of trade-union members	Labor Gazette (Canadian), March, 1922.	The corresponding per cent on Jan. 1, 1922, was 15.1 and on Feb. 1, 1921, 13.1.

HOUSING.

Building-Trades Unions' Construction and Housing Council of Boston.[1]

By Mary Conyngton.

SINCE the close of the war several cooperative building associations have been formed by trade unions, of which one of the earliest was the Building-Trades Unions' Construction and Housing Council of Boston, incorporated under the laws of Massachusetts in the latter part of 1920. At that time the industry was in an unsatisfactory condition. There was a painful lack of houses practically throughout the country, but housing work had come almost to a standstill, and no end to the deadlock was in sight. To some of the building workers the situation seemed wholly unnecessary. It should not be impossible to adjust matters so that the much-needed houses could be built at nonprohibitive prices, and if the employers were unable to do this, the workers might show the way. Buildings, they argued, do not grow; they are constructed by building-trades' mechanics, each performing his part. Why should not these mechanics organize and deal directly with the customer, cutting out the contractor and subcontractor, and thereby reducing costs? And in doing so, might they not arrange a democratic management for themselves, under which each would have a voice in determining what should be done, and so give themselves a much keener interest in the work than they had under ordinary management? There were various interesting possibilities about the plan, but it was well to begin modestly, so at first their aims, as set forth in their prospectus, were as follows:

> The purpose of the council shall be to carry on building construction in its entirety.
> The immediate work of the council shall be to stimulate the building of homes:
> First. By taking charge of construction for those prepared to build.
> Second. By the cooperation of the trades in the elimination of all unnecessary overhead charges.
> Third. By furnishing sufficient workers to construct each home quickly and economically, consistent with good workmanship.

The council, or as its members are more apt to call it, the cooperative, was organized with a capital of $500,000, the par value of the shares being $10. Share ownership was at first restricted to members of the building-trades' unions, but this limitation was afterwards removed, and ownership permitted to any holder of a union card. Each member has one vote, regardless of the extent of his holdings. The business of the corporation is managed by a board of directors, elected by the shareholders, each craft being entitled to at least one representative on the board. From the first the members decided that the funds should not go into high salaries, and so far they have

[1] This article is based on information obtained from prospectuses and reports and through interviews with members and nonmembers who had either had work done by the council, or, as students of the building situation, were interested in its development.

had but one salaried official, the president and business manager, who is paid what he would get if working full time in his trade of bricklaying. The board of directors meets weekly, the members giving their time without compensation, passes on all general matters, and appoints for each job undertaken a foreman, who is expected to work at his trade, his duties as foreman being rather incidental. "We need somebody there," explained the president, "to telephone to when any question comes up, and to give receipts for any material delivered, and to say where it is to be put, and generally to be in charge, but we don't expect that they will spend much time supervising. The men are working for themselves, so they don't need that."

When a job is undertaken, the cooperative gives preference in employment to members, but takes on outsiders whenever occasion requires. Whether members or not, these men are engaged only for the definite job, and are paid off when that is finished. The organization does not, like the English building guilds, guarantee continuous employment, or pay for unemployed time, though continuous employment is looked forward to as an ideal which they may realize if their organization prospers. They pay trade-union rates and observe trade-union conditions in all their work, except that there are no jurisdictional limitations. "We are working for ourselves," is their principle. "What we want is to turn out the best possible job as quickly and as cheaply as we can; why should we spend time disputing whether one man or another does a particular part of it? The point is to get it done." So if the plumber finds that a bit of plank or flooring must be removed in the course of his work, he borrows the carpenter's saw to cut it away; if the steam fitter needs a helping hand, the bricklayer stands ready to give it, and so on through the trades. One of the council members admitted that there was some difficulty in getting new workers, unaccustomed to cooperation, to take this point of view, but there is a nucleus of members thoroughly imbued with the idea, some of whom are apt to be on every job, and who make it their business to try to inspire newcomers with the same spirit. "They usually take the idea pretty quickly," said one member, "and join in with a will. Of course, they aren't all equally good workers, but I don't think we ever got hold of a man who wouldn't in a little while put out his best efforts, both to do his own work and to help the others along. If we should, of course, we wouldn't feel obliged to keep him on, but that question hasn't come up yet."

In arranging terms for a job an estimate is made of the cost of materials and labor, and to this 10 per cent is added to cover overhead, insurance, and profit. On this basis, the council's price is usually from 15 to 20 per cent lower than that of the ordinary contractor. No complaint has ever been made of the quality of work or materials or of the time taken for doing a job.

The council has had rather a difficult time in getting fairly started. It was organized during the worst period of stagnation the building industry has known for years, so that general conditions were against it. Soon after its formation a considerable part of its capital was invested in a piece of land in Dorchester, large enough to provide a good site for eleven houses, which it was thought might be bought or

rented by members. The land was purchased outright, instead of being taken with a mortgage, and the tying up of so much of their capital proved a serious handicap to the council, especially as the depressed industrial conditions prevailing through 1921 kept them from carrying out their plans of building and realizing on their investment. Also at first, according to their statement, they underestimated the cost of some jobs, with a resultant loss they were ill able to bear, and occasionally found it impossible to collect moneys due them, so that it was sometimes very difficult to meet their weekly pay roll. By one means or another, however, when pay day came around they always had the money in hand to pay their workers, so that among members and nonmembers alike their credit is good. During 1921, although they built two houses, the greater part of their work was on garages and repairs, and along these lines they have been gradually drawing out of their difficulties. Up to the beginning of 1922, in addition to building two houses, they had put through 69 jobs, ranging in value up to about $8,000. Through the dullest period of 1921 they had kept an average weekly force of 16 men employed, and in December and January this average had risen to 28. For the last week of January, 1922, their pay roll was $2,400. On the whole, they feel that the outlook is encouraging.

Business success is a necessity if the plan is to be continued; but it is only one part, and to their minds not the most important, of what the cooperators hope to attain. The movement stands to them for the opportunity to regain their crafts, to reestablish the vital connection between a man and his work which has been crowded out in the modern organization of industry. One of them voiced the sentiments of many. "When I go to a boss and ask for a job," he said, "do you suppose he asks me how well I'm trained? Not in a lifetime. What he wants to know is how fast I can work, not how well. I don't want to work that way. I know my trade from A to ampersand; I like it; it's the best work there is if you can have a free hand, and the cooperative gives me that. I want the chance to put my heart into my work, not just to spend so many hours a day doing what somebody tells me to do."

This spirit results to the advantage of the employer as well as of the worker. The men do know their trades, they know how and where to introduce economies if these are desired, and the necessity for professional supervision and aid is reduced to a minimum. For the first house built no architect was employed. Rough plans were given to the council, which were made into blue prints by one of the experienced carpenters, and from these the men worked. This house has been estimated by experts as worth about $2,000 above what it cost, although it was built while materials were still at their high point. Various other jobs have been entrusted solely to the council in this same fashion, and, like the craftsmen of old, the men find a real interest and zest in doing individual work and meeting any difficulties by their own resourcefulness and initiative. Sometimes they seek a tangible evidence of their pride of craftsmanship. In the house referred to above is a fireplace which was designed to be ornamental as well as useful, and around it are worked in, of course with the cordial approval and cooperation of the owner, a series of tiles, of a soft, bluish-green color, hard to define but pleasant

to look at. On each appears in black the characteristic tools of one of the building trades and a statement that the members of such and such a local of such a union worked on this house, giving the date. The colors blend so softly that there is nothing glaring or inharmonious about it; the tiles must be inspected rather closely before the insignia and inscription can be perceived; but the men who built the house have signed their work.

Then, again, the men look upon the cooperative as meaning fellowship. The group spirit is stressed in every way possible. Workers on a job expect to help each other, and if one is taken on who proves to be less expert than might be desired, it is a matter of trade pride to help him up to standard. The community of interest extends beyond the work. The completion of each important job is marked by some sort of celebration by those who have worked on it, with their wives and families, and various picnics and social gatherings are held for the purpose of bringing members together.

Also, through the organization the members believe that they are working toward industrial independence. So far, the scope of their work has been small, but they look forward to a time when the cooperative will be able to provide continuous work for all its members. They see no reason why the building industry, properly managed, should not be able to provide steady work under good conditions and at union wage rates for all engaged in it, and toward this goal they are working. They are not interested at present in paying dividends, but from the sale of stock and from such profits as their 10 per cent charge allows, they are building up a fund, partly as a protection against bad debts and times of industrial depression and partly with a view to extending their field of operations to the provision of building materials. They dream of a time when the whole industry, from the first step in procuring raw materials to the last detail of the finished building, shall be carried on cooperatively and under democratic management, and their faith in the realization of this dream is strong. One of them sums it up in a recent article:

> There are plenty to predict failure, and a few members have withdrawn, discontented with methods and management; but I am sure we Boston wage builders are on the right track, leading to a method of production which will give contentment and work to thousands who will feel that they are free and independent American workmen.

Housing Investments Permitted to Life Insurance Companies in New York.

ON APRIL 14, 1922, Governor Miller signed the so-called Lockwood committee bill permitting life insurance companies to invest up to 10 per cent of their admitted assets in real estate and housing enterprises. According to the present understanding, this permission is not to extend beyond March 1, 1924, but up to that date the terms of the law confer wide powers.

> Every life insurance corporation, foreign or domestic, transacting business in this State may purchase land in any city of the first class in this State, and on land in such a city acquired pursuant to any other provision of this chapter may erect apartment, tenement, or other dwelling houses, not including hotels. Such corporations may thereafter hold, maintain, manage, collect and receive income from, and from time to time sell or convey the lands so purchased and the improvements thereon.

While the terms of the law are general, the only company known to be ready to take advantage of them is the Metropolitan Life Insurance Co. In January last the Lockwood committee announced that in response to its appeal this company stood ready to invest up to 10 per cent of its assets in low-priced housing if legal permission to do so could be secured. Tax exemption had given a great stimulus to housing in New York City, but no tenements were being put up for the working people. At that time it was considered by builders generally that it was impossible to put up houses to rent for less than from $15 to $20 a room per month, and such a rent was entirely beyond the means of great numbers, who were therefore compelled to crowd together in most unhygienic fashion or to live in tenements admittedly unfit for occupancy. In the projected enterprise costs were to be reduced in every possible way, and as soon as the plan was announced a number of those interested in building came forward with offers to help.

When Samuel Untermyer, counsel of the Lockwood housing committee, put the matter up to them, some big contractors, manufacturers of building materials, and the Building Trades Council offered cooperation that will be vital in deflating present costs. The unions have undertaken to work, without payment for overtime, an extra half hour per day and three and a half hours on Saturday, but demand in return for this concession an option on one-fourth of the apartments constructed for the men engaged on the buildings. * * * One of the largest building construction concerns in the country has offered to forego all profit on a hundred million dollar contract. Electrical engineers, truckmen, and riggers, a lumber concern, a plastering contractor, manufacturers of window shades, sashes, interior woodwork, flooring, plaster, and other items likewise have offered their services on a cost basis. [1]

Even without such concessions as these the Metropolitan Co. believes that it can erect sanitary, well-ventilated tenements to rent at $9 a room per month or less, clearing 6 per cent interest on the investment. It proposes to begin operations at once with the construction in Long Island City or Astoria of 50 houses planned to accommodate 32 families each. The houses are to be four-story structures containing three, four, and five room apartments with baths. All are to be steam heated, with abundant light and air, interior courts being done away with. The cost of the project is expected to be between $5,000,000 and $6,000,000, and it is hoped that the houses will be ready for occupancy by the coming fall.

Government Aid for the Building of Workmen's Houses in Spain.

TO ALLEVIATE the conditions arising from the housing shortage in Spain, especially in Madrid, a royal decree [2] was issued December 10, 1921, providing for Government aid to societies formed for the building of workmen's homes.

According to this decree the State, Province, or municipality may rent, sell, or give away any of its land as a site for workmen's houses, and the city councils may purchase land for this purpose. To encourage such building operations, many forms of Government taxes, such as those ordinarily applying to the construction of buildings,

[1] The Survey, February 11, 1922.
[2] Gaceta de Madrid, Dece. 11, 1921, pp. 858–866.

the purchase of land, the making of contracts, the issuance of bonds, the formation of companies, etc., are waived for a period of 20 years from the date of completion of the building, and in special cases materials for building workmen's homes may be exempt from customs duties. Government loans with a 30-year limit may be made to individuals, corporations, or cooperative societies up to a total of 100,000,000 pesetas ($19,300,000, par) to yield 3 per cent, except that with the consent of the cabinet the rate may be reduced to 2 per cent. The maximum loan is limited to 55 per cent of the value of the land and 70 per cent of the value of the completed houses. Advances on the loan may not be made beyond 55 per cent of the value of the land or beyond 60 per cent of the value of the construction work completed.

The Government is authorized to grant subsidies amounting to 25 per cent of the value of the land and buildings, and if, in cities where the housing problem is very acute, workmen's houses are completed within a year after the publication of this decree, a subsidy amounting to 50 per cent may be granted.

Other articles of this decree define the term "cheap houses" as therein used, deal with the legal status, the rent, interest and security for loans, the inspection and sanitation of "cheap" houses, the duties of the city councils under this decree, and the administration of the law. Within one year after the regulations of this decree are published the city councils of those cities suffering from a housing shortage must submit plans for a housing project, and they may expropriate land needed for housing purposes. The provisions of this decree are to be administered by the Ministry of Labor through the Institute of Social Reforms. The local administration is in the hands of a council on cheap houses (junta de casas baratas) in each municipality concerned.

INDUSTRIAL ACCIDENTS.

Metal-Mine Accidents in the United States During 1920.

THE report of the United States Bureau of Mines on metal-mine accidents in the United States during 1920 (Technical Paper 299) shows a reduction in the fatal accident rate and in the number of men employed, but a gain in the number of shifts worked per employee. Reports from 3,281 operators showed 425 fatalities and 32,562 nonfatal injuries among 136,583 employees, or 3.16 fatalities and 242.02 injuries per 1,000 300-day workers. The corresponding rates for 1919 were 3.47 killed and 233.60 injured. The fatality rate was the lowest on record. The nonfatal injury rate, however, was the third highest during the past decade, being exceeded only by the rates for 1915 and 1916.

There was a net loss of 8,679 in the number of men working at all mines (except coal) in 1920. Only in the nonmetallic mineral group was there an increase in number of employees. The average number of days worked per man was 296, as compared with 279 in 1919. With regard to the increase in time worked the report states:

> The smaller number of men employed does not represent a corresponding decrease in work done, however, because the workers were employed for a larger number of days than in 1919. In fact, the iron mines and lead and zinc mines reported an increased number of shifts worked, although the average number of men employed was smaller than in 1919. The reports show that each employee at copper mines averaged 16 more work days in 1920 than in 1919; employees at gold and miscellaneous metal mines gained 12 days per man; at iron mines, 12 days; at lead and zinc mines, 31 days; and nonmetallic mineral mines, 39 days, the net gain for all mines being 17 days per man employed.

The classification of injuries according to type is as follows:

FATAL, SERIOUS, AND SLIGHT INJURIES, 1915 TO 1920.

Injury.	1915	1916	1917	1918	1919	1920
Fatal	553	697	852	646	468	425
Serious (time lost more than 14 days):						
Permanent disability—						
Total [1]	35	44	39	62	7	12
Partial [2]	574	693	666	640	321	345
Others	7,242	10,099	10,220	9,066	7,848	7,894
Slight (time lost, 1 to 14 days, inclusive)	27,444	37,401	35,361	33,147	23,330	24,311
Total nonfatal injuries	35,295	48,237	46,286	42,915	31,506	32,562

[1] Permanent total disability: Loss of both legs or arms, one leg and one arm, total loss of eyesight, paralysis, or other condition permanently incapacitating workman from doing any work of a gainful occupation.
[2] Permanent partial disability: Loss of one foot, leg, hand, eye, one or more fingers, one or more toes, any dislocation where ligaments are severed, or any other injury known in surgery to be permanent partial disability.

The following table shows the number of employees, the number of fatalities and injuries, and the fatal and nonfatal accident rates, by kind of mine, in 1919 and 1920:

NUMBER EMPLOYED, NUMBER KILLED AND INJURED, AND FATAL AND NONFATAL ACCIDENT RATES IN METAL MINES DURING 1919 AND 1920.

Kind of mine.	Active operators.	Number of men employed.	Average days active.	Number killed.	Number injured (time lost more than 1 day).	Number of 300-day workers.	Number killed per 1,000 300-day workers.	Number injured per 1,000 300-day workers.
1919.								
Copper	410	39,327	301	140	12,236	39,522	3.54	309.60
Gold, silver, and miscellaneous metal	2,430	32,130	267	126	5,469	28,590	4.41	191.29
Iron	157	47,676	283	139	9,098	44,962	3.09	202.35
Lead and zinc (Mississippi Valley)	141	12,968	252	45	3,185	10,897	4.13	292.28
Nonmetallic mineral	245	13,161	248	18	1,518	10,900	1.65	139.27
Total	3,383	145,262	279	468	31,506	134,871	3.47	233.60
1920.								
Copper	387	35,254	317	128	12,047	37,274	3.43	323.20
Gold, silver, and miscellaneous metal	2,358	29,933	279	117	5,704	27,849	4.20	204.82
Iron	154	45,990	295	106	9,072	45,249	2.34	200.49
Lead and zinc (Mississippi Valley)	119	11,638	283	36	3,607	10,998	3.27	327.97
Nonmetallic mineral	263	13,768	287	38	2,132	13,170	2.89	161.88
Total	3,281	136,583	296	425	32,562	134,540	3.16	242.02

The report shows the causes of accidents in considerable detail. Comparative data for accidents at metal mines, coal mines, and quarries are given; also statistics of accidents at metallurgical works during 1920.

Accidents at Metallurgical Works in the United States in 1920.

THE report of the United States Bureau of Mines on accidents at metallurgical works during the calendar year 1920, recently issued as Technical Paper 297, presents data for the entire metallurgical industry except iron blast-furnace plants. The figures for smelting plants cover copper, lead, gold, and silver smelters and refineries; those for ore dressing plants represent concentrating plants for copper, lead, and zinc ores, stamp mills, cyanide plants, iron-ore washers, flotation mills, and sampling works.

The following table summarizes the accidents at mills, smelters and auxiliary works, 1916 to 1920:

FATAL AND NONFATAL ACCIDENTS AT MILLS, SMELTERS, AND AUXILIARY WORKS, 1916 TO 1920.

Item.	1916	1917	1918	1919	1920
Fatal	83	116	94	64	61
Serious (time lost more than 14 days):					
Permanent disability—					
Total [1]	17	5	7	2	2
Partial [2]	200	202	247	71	147
Other	3,443	3,302	3,028	[3] 1,869	[3] 1,990
Slight (time lost 1 to 14 days, inclusive)	11,420	10,069	9,411	6,184	6,724
Total nonfatal injuries	15,080	13,578	12,693	8,126	8,863
Grand total (fatal and nonfatal)	15,163	13,694	12,787	8,190	8,924
Men employed	80,201	84,042	79,752	61,129	56,908

[1] Permanent total disability: Loss of both legs or arms, one leg and one arm, total loss of eyesight, paralysis, or other condition permanently incapacitating workman from doing any work of a gainful occupation.

[2] Permanent partial disability: Loss of one foot, leg, hand, eye, one or more fingers, one or more toes, any dislocation where ligaments are severed, or any other injury known in surgery to be permanent partial disability.

[3] "Other serious accidents" in ore-dressing plants, smelting plants, and auxiliary works include 50 cases of permanent partial disability in 1919 and 72 cases in 1920, which could not be segregated.

From this table it appears that 61 fatal and 8,863 nonfatal accidents occurred in 1920, a decrease of 3 fatalities and an increase of 737 injuries as compared with 1919. The number of men employed was 56,908, a reduction of 7 per cent from 1919; they worked a total of 18,935,908 shifts, 2 per cent less than in 1919; the average of 333 shifts per man represents an increase of 17 shifts, or 5 per cent, in the average number of working days per man. The accident rates, based on a standard of 300 working days to the year, were 0.97 killed and 140.42 injured per thousand men employed, as against 0.99 killed and 126.26 injured the previous year.

A summary of the principal data is given in the table below:

SUMMARY OF LABOR AND ACCIDENTS AT METALLURGICAL PLANTS, 1913 TO 1920.

	Men employed.		Days of labor performed.	Average days active.	Total number killed.	Number killed per 1,000 300-day workers.	Total number injured.	Number injured per 1,000 300-day workers.
	Actual number.	300-day workers.						
Ore-dressing plants:								
1913	14,985	16,154	4,846,338	323	16	0.99	1,977	122.38
1914	15,128	15,225	4,567,529	302	23	1.51	1,434	94.19
1915	18,564	19,107	5,732,184	309	30	1.57	2,095	109.65
1916[1]	22,365	23,470	7,041,083	315	33	1.41	3,184	135.66
1917[1]	24,111	24,372	7,311,499	303	47	1.93	2,952	121.12
1918[1]	21,809	22,517	6,754,962	310	35	1.55	3,142	139.54
1919[1]	17,262	16,862	5,058,545	293	25	1.48	2,057	122.21
1920[1]	15,959	15,977	4,793,151	300	21	1.31	2,624	164.24
Smelting plants:[2]								
1913	20,564	24,309	7,292,766	355	47	1.93	4,247	174.71
1914	27,879	32,336	9,700,769	348	33	1.02	5,673	175.44
1915	31,327	36,262	10,878,486	347	38	1.05	5,718	157.69
1916[1]	43,829	49,363	14,809,046	338	36	.73	9,656	195.61
1917[1]	44,376	50,659	15,197,643	342	53	1.05	7,745	152.88
1918[1]	39,899	45,439	13,631,601	342	42	.92	6,743	148.40
1919[1]	28,777	31,324	9,397,082	327	34	1.09	4,431	141.46
1920[1]	24,944	29,137	8,741,116	350	20	.69	4,147	142.33
Auxiliary works:								
1913, 1914, 1915[3]								
1916	14,007	15,763	4,729,010	338	14	.89	2,240	142.10
1917	15,555	17,014	5,104,146	328	16	.94	2,881	169.33
1918	18,044	20,111	6,033,184	334	17	.85	2,808	139.63
1919	15,081	16,172	4,851,726	322	5	.31	1,638	101.29
1920	16,005	18,005	5,401,641	337	20	1.11	2,092	116.19

[1] Not including auxiliary works, as shops, yards, etc.
[2] Exclusive of iron blast furnaces.
[3] Data for the years 1913, 1914, 1915 not separately reported.

Detailed tables classify the accident data according to cause, State, etc. In ore-dressing plants and smelting plants "other machinery," i. e., machinery other than crushers, rolls, stamps, tables, and jigs, were responsible for the greatest number of fatal accidents, and in the auxiliary works railway cars and locomotives caused the greatest number of fatalities. Falls of persons caused the largest number of nonfatal injuries (12.31 per cent) in ore-dressing plants; burns from matte, slag, or molten metal were the principal cause of injury in smelters, being responsible for 21.63 per cent; and falling objects were the principal cause in auxiliary works, causing 17.88 per cent of the nonfatal injuries.

Fatal Industrial Accidents in Canada, 1921.[1]

THE following table summarizes certain data on industrial fatalities in Canada for 1920 and 1921 as received by the Dominion Department of Labor:

FATAL INDUSTRIAL ACCIDENTS, 1921 COMPARED WITH 1920, BY INDUSTRIES.

Industry.	1920[2]	1921	Industry.	1920[2]	1921
Metals, machinery, and conveyances..	80	54	Navigation	23	30
Food, tobacco, and liquor	31	12	Miscellaneous transport	80	35
Textiles, carpets, and cordage	5	2	Mines, smelters, and quarries	165	109
Clothing and laundering	3	4	Building and construction	112	147
Pulp, paper, and fiber	31	15	Lumbering	191	128
Printing and publishing	4	1	Public and municipal employment	28	27
Woodwork and furniture	20	8	Public utilities	39	44
Leather, boots, shoes, and rubbers	6	.....	Agriculture	32	33
Clay, glass, and stone	14	13	Fishing and hunting	43	17
Paints, oils, chemicals, and explosives.	21	9	Miscellaneous	126	50
Steam railway service	181	158			
Electric railway service	7	9	Total	1,192	908

[2] Revised figures.

The causes of the industrial fatalities in 1921 were as follows:

FATAL INDUSTRIAL ACCIDENTS IN 1921, BY CAUSES.

Causes.	Total.	Causes.	Total.
Prime movers	49	Tools	4
Working machines	29	Runaways and animals	12
Hoisting apparatus	31	Moving trains, vehicles, etc	208
Dangerous substances	115	Falls of persons	125
Stepping on or striking against objects	13	Other causes	144
Falling objects	156		
Handling objects	22	Total	908

[1] The Labor Gazette (Canada). Ottawa, March, 1922, pp. 360-363.

WORKMEN'S COMPENSATION.

Recent Reports.

New York.

THE annual report of the superintendent of insurance for the State of New York summarizes the transactions in the compensation insurance field for the year closing December 31, 1921. A steady increase in premium income has taken place from year to year since the law came into effect in 1914, until the depression of 1921. Data for this year are incomplete, owing to the practice of estimating pay rolls for purposes of premium payments, subject to adjustment on final audits. What is indicated as an undesirable practice of underestimating the pay rolls, involving the advance of excessive credit to policyholders, is adverted to, with a suggestion that if a lower commission rate was allowed on additional premiums, a more adequate advance premium probably would be collected currently.

Premiums for the calendar year 1920 aggregated $42,587,125, losses amounting to $24,463,950. This develops a loss ratio for the year of 57.44 per cent as against an average of 60.51 per cent for the six and one-half years, July 1, 1914, to December 31, 1920. The expense ratio for 1920 was for nonparticipating carriers 39.67 per cent and for participating carriers 19.54 per cent. On this point the report says: "Attention must again be directed to the high expense ratio of the stock companies. The latest available information indicates that between 1919 and 1920 the ratio went up almost exactly one point—that is, from 38.70 per cent to 39.67 per cent." It is observable that the expense ratio of nonparticipating carriers in 1920 was almost exactly double that of participating carriers. A slight offset must be allowed from the fact that the former paid something over 3 per cent for taxes to the Federal and State Governments, while the participating carriers are relieved from this payment.

A revision of rates is in prospect "in view of the widespread changes in economic conditions since the 1920 rate revision was undertaken." However, it was said to be impossible to forecast the results of such a revision, whether there would be a modification of the general rate level, or of the relation between the rates for various classifications, or both. It is felt to be desirable that a method be found "for making the general rate level more materially responsive to current conditions, independently of revision of individual rates, and with due regard for the equitable treatment of policies expiring at various dates subsequent to the revision."

The department renews its suggestion that the State insurance fund be placed under the same official supervision as other insurance carriers in the State. A specific reason is the statement that has been made publicly that the special fund provided for the compensation of second injuries, sustained by contributions where deceased employees leave no dependents, is insolvent. While the State fund no longer

draws on the State for administrative expenses, it is exempt from taxation and free from rate supervision and other supervision except as to investments and reserves, so that policyholders may be divided into groups for the receipt of dividends, which the fund itself determines.

Wisconsin.

THE Industrial Commission of Wisconsin issues a pamphlet as its ninth annual report, but states that this report covers two years in the administration of the workmen's compensation act. The number of cases settled and the amounts of benefits were greater in the year ending June 30, 1921, than for any preceding year. In the year 1919–20, 14,445 cases were settled; benefits aggregated $2,040,505, of which $473,433 was for medical aid—an average of $33 per case. For the year 1920–21 the number of cases settled was 17,622, all benefits totaling $3,030,300. Of this sum $668,455, or an average of $38 per case, was for medical aid.

Average benefits for the period September 1, 1911, to June 30, 1921, are $120, advancing from $71 per case for the first 10 months to $172 per case for the last fiscal year. Indemnity benefits ranged for these respective periods from $50 to $134, and medical benefits from $21 to $38. The figures for medical aid in no case include those cases in which no indemnity was paid. "It is estimated that if these cases were included the total medical aid would be about 25 per cent greater than indicated.

The increases in the amounts of indemnity are due to two factors—liberalization of the law and the advance in wage rates. Prior to September 1, 1919, the maximum weekly indemnity was $9.75. At that date the maximum was increased to $14.63, and the wages paid caused considerably more than one-half of all cases settled under the act to receive that maximum. An amendment of 1921 advanced the maximum still further to 65 per cent of $26.00, or $16.90 per week.

Temporary disability cases constituted 89 per cent of the total number of cases settled during the two years covered by this report. These cases accounted for 68 per cent of the medical aid, 30 per cent of the indemnity, and 38 per cent of the total benefits. Death and permanent total disability cases constituted but little over 1 per cent of the total number of cases, but absorbed 28 per cent of the indemnity and 22 per cent of the total benefits. A little less than 10 per cent of the cases settled were for permanent partial disability, but 42 per cent of the indemnity and 39 per cent of the total benefits went for their compensation.

Nothing is presented in this report as to cause or nature of injury, time lost, number of dependents, etc., the report being almost exclusively one of administration. The bulk of the pamphlet of 90 pages (all except the first 16) is taken up with memoranda and statements of decisions, with an index to awards reported in the seventh, eighth, and ninth reports on workmen's compensation. An analysis of the accident data for the years 1915 to 1920, published in a recent issue of the Wisconsin Safety Review, was discussed in the April number of the MONTHLY LABOR REVIEW (pp. 191 to 193).

New Brunswick.

THE Workmen's Compensation Board for the Province of New Brunswick issues as its third annual report an analysis of the accidents occurring during the year 1921. The financial statements relate chiefly to the year 1920.

The number of accidents reported during the year 1921 aggregated 4,834, of which 960 were minor. Of the remainder, 3,287 cases of temporary disability have been finally disposed of besides 217 cases of permanent partial disability and 43 deaths. Claims partially disposed of amounted to 219, while 108 are reported as "in assembly." The estimated expenditure for the year is $457,017.07, with an estimated income of $543,863.55, leaving a provisional balance of $86,846.48.

The estimated figures for the previous year called for corrections in expenditure of nearly $65,000 and in income of about $47,000, additions being made in both cases. The actual income for 1920 was $603,523.25, while the adjusted expenditure was $585,745.22, leaving an adjusted balance of $93,923.57.

The Province maintains an exclusive insurance fund, the industries of the Province being divided into seven classes, there being in addition classes for the Dominion and Provincial Governments, respectively. In one of these, lumbering, pulp mills, etc., there is a deficit of $70,505.52, but in all others there is a favorable balance as shown by the estimated balance for the year given above. The fund shows assets amounting to $683,803.09, sundry liabilities of $101,571.81 and reserves of $495,384.80. The administrative cost, including the total cost of all equipment, amounted to 8¼ per cent.

Tables giving details of accident experience, etc., show for the year 1920 in all industrial classes the closing up of 2,967 temporary total disability claims amounting to $195,063.33, besides medical aid, $39,324.30, and hospital maintenance, $15,606.23. The cost of 254 permanent partial disabilities was $103,053.87; while in 47 fatal accidents, funeral expenses amounted to $3,661.65 and reserves for benefits to $188,944.76.

The average days lost in completed claim cases during 1921 on account of temporary disabilities was 26.13, while for permanent partial disabilities it was 77.98. The average age of injured workers was 33.86 and the average wage was $21.82 per week. Other tables show week of termination of temporary disability cases, nature of injury, cause of accidents, particulars of permanent partial disability cases, etc.

Of 34 industrial death cases, 7 involved the payment of funeral expenses only; the number of dependents was 83, of which 16 were widows and 58 were children, 9 other relatives surviving.

LABOR LAWS AND COURT DECISIONS.

Ownership of Property of Local Trade-Union, Connecticut.

A RECENT case before the Supreme Court of Errors of Connecticut involved the question of the rights of a parent body and a subordinate or local organization. (Grand Lodge of International Association of Machinists et al. *v.* Reba et al., 116 Atlantic Reporter, p. 235.) The grand lodge had revoked the charter of the local at Bridgeport, Conn., and sued in the superior court of Fairfield County to obtain possession of the funds and property of the local, amounting to about $7,000. Judgment in this court was in favor of the local lodge, and the grand lodge appealed. Reba and his co-defendants were officers and trustees of the local, and claimed that they were entitled to hold the property for the organization, in spite of the revocation of the charter formerly held from the grand lodge. This contention the supreme court upheld, finding no error in the judgment of the court below.

The constitution of the local lodges, as prescribed by the grand lodge, contained a provision to the effect that the property of a local lodge reverted to the grand lodge in case of the merger or dissolution of a local. There was also provision for the revocation of charters, but no provision for the reversion of property in such a case, unless the revocation could be called a lapse of the local. The court held that the right of possession of a voluntary association (neither of the parties was incorporated) is in the association; i. e., in its members or their officers and agents; and that while the revocation of the charter severed the relations between the grand and local bodies, it does not necessarily extinguish the local, so that the property that it might hold would remain in its possession without disturbance, unless there was a clear and explicit provision in the constitution, amounting to notice and agreement, transferring the property. The contention of the parent lodge that revocation was equivalent to lapse was therefore denied, no such presumptions being indulged in the face of the law as decided by earlier cases.

Coal Control Law in Indiana.

A BRIEF article under the above title appeared in the MONTHLY LABOR REVIEW for November, 1920 (pp. 199, 200), summarizing the main provisions of the law and the results of an attempt to secure an injunction against its enforcement. In short, the act gave to the State board of accounts, acting as a special coal and food commission, power to regulate the production and distribution of coal within the State. Prices and profits were subject to its control, but all costs and reasonable returns were to be taken into consideration. The act was of a temporary nature, operative from its enactment, July 31, 1920, to March 31, 1921, unless extended. No action

to extend was taken, so that the act expired by limitation on the date named.

The case for an injunction to prevent the enforcement of the act was decided adversely to the petitioner, no oppressive or illegal conduct on the part of the commission being properly anticipated. The court dismissed the case without prejudice, "and the record may show affirmatively that there is absolutely nothing decided except the one question, that the State, under its police power, can lay its hand upon the coal-mining industry." (American Coal Mining Co. *v.* Special Coal and Food Commission of Indiana, 268 Fed. 563.)

From this finding the company appealed to the Supreme Court of the United States, and the case was docketed as No. 165, October term of 1921. On March 10, 1922, the case was dismissed with costs on motion of the counsel for the appellant (42 Sup. Ct. Rep. 273).

Following the decision of the district court the commission notified the operators to pay the tonnage tax immediately, and also announced that it would fix prices within 10 days of the date of the court's decision. A report of the commission gives an account of its operations under the act from the enactment of the law, July 31, 1920, to January 1, 1921. Separate hearings were given to all licensed coal operators, to wholesalers and jobbers, and to retail dealers. Costs of production and of the conduct of the various businesses were secured, and the data and evidence obtained were used as the basis for price-fixing orders, which were issued October 5, 1920.

Order No. 1 fixed the price of coal at the mouth of the mine. For this purpose mines were divided into four groups, the first comprising 85 per cent of the production, classed as low-cost production mines. Groups 2 and 3 were allowed a higher price, mining being more expensive, while group 4 comprised mines producing Brazil or Indiana block coal. This order was subsequently modified by special orders on showings that the original grouping and price had not been entirely equitable.

Order No. 2 fixed the allowance of handling charge for wholesale dealers and jobbers, 15 cents per ton being the maximum. Only one such charge of 15 cents per ton could be made, without regard to the number of jobbers or wholesalers handling the coal. This checked the number of wholesalers passing the coal through various hands, each adding his margin of profit, which "had resulted in many cases of abnormal prices and was productive of much of the extortion which had prevailed in the coal industry." If a producing company maintained its own selling organization it was allowed the 15 cents handling charge in addition to its price of coal at the mouth of the mine. While the act provided for appeals to the court from any final order, no appeal was taken during the period covered by this report from orders 1 and 2.

Order No. 3 allowed retail coal dealers a margin of $2.25 a ton, this to cover all charges from the unloading of the car to the delivery to the curb of the consumer. Industrial and economic conditions in cities more remote from the mining area necessitated some modifications of this order; appeals were also taken to the circuit court of Marion County under this order, "but none had been tried or set down for trial." Modifications of order No. 3, in addition to the local adjustments noted, were made, but order No. 2 remained as originally issued.

With the approach of winter, localities that were destitute of coal called upon the commission for supplies, and though the rates had not yet been fixed, a number of operators agreed to take care of the emergencies and await the result of the order, an arrangement which worked satisfactorily, but came to an end with the promulgation of order No. 1, issued October 5.

An allocation order was issued later in October, calling on the different producing companies of the State to furnish a designated amount of coal to be sold or offered for sale within the State of Indiana each week. Weekly reports of coal shipped to Indiana consignees and destinations were required. With the exception of a few operators whose products were contracted for outside the State, "there was a very satisfactory compliance with this order." Ordinarily this would have cared for the needs of the consumers, but communities in the northern and eastern parts of the State who had formerly procured their fuel supply from the south and east had been unable to get coal, and in the exercise of "its full authority" the commission issued emergency orders up to the close of November, each directed to a particular named operator, ordering him to ship a specified quantity of coal to a designated dealer, officer, or consumer in some designated town. If for the public schools, the consignee was a school officer; and if for domestic use, the coal was directed to a licensed retail dealer who was instructed to sell in small quantities, making as wide distribution as possible at the prices fixed by the commission. More than 2,000 cars were shipped under this system; "schools and public utilities which were to be closed were kept open and operating, and individual consumers were protected from suffering." The report estimates that there was a saving to the consumers of the State amounting to $1,500,000 by reason of these allocations and emergency orders.

On November 27, 1920, the Vandalia Coal Co. and the Vigo Coal Products Co. prayed for an injunction restraining the commission from interfering with the disposition of the coal produced in their mines on the grounds (1) that there was a direct interference with interstate commerce; (2) an impairment of the completion of preexisting contracts; (3) that the orders compelled the owner of coal land to sever the coal from his soil; (4) that the orders interfered with the proper handling of coal which was by its nature subject to risks of spontaneous combustion and consequent destruction; and (5) that there was a threat of execution of penalties. Another point under the fourth head was that orders directing shipment to designated consignees involved entering into transactions with unknown persons whose credit was not known to be of such a nature as to warrant shipments without security. Each of these grounds was held to be a valid one for the issuance of an interlocutory injunction (Vandalia Coal Co. *v.* Special Coal and Food Commission, 268 Fed. 572).

Following the issue of this temporary injunction no further emergency orders were issued, "and in fact none have been necessary," many operators cooperating in a friendly way to care for all requests for emergency supplies. New business contacts were established, through the agency of the commission, and markets opened for Indiana coal which had formerly been supplied from outside sources at higher costs. Some companies cooperated freely and heartily, while others, as indicated, were hostile. "The opportunity during the life of the

special coal and food commission to increase the consumption of Indiana coal has been one which good business men ought never to have overlooked."

Besides the legal proceedings under the above, E. E. Heller & Co., retail coal dealers, brought a suit, calling in question the constitutionality of the law as applying to retailers, but without requesting a restraining order. The motion of the commission to dismiss the appeal was denied by the court, but proceedings were never pressed, and the cases were formally dismissed.

The financial statement shows 382 licenses issued operators at $25 each, totaling $9,550; for 197 licensed wholesalers at $10 each, $1,970; for 1,903 retailers at $5 each, $9,515; tonnage tax of 1 cent per ton, $83,872.45, or total receipts of $104,907.45. Disbursements for administration amounted to $23,305.62, leaving a balance at the end of the calendar year of $81,601.83.

Following the injunction as to emergency orders, November 27, 1920, many of the large producing companies refused to pay the tonnage tax, at least pending the decision of the Supreme Court. An agreement was subsequently reached by which no effort was made to extend the law or to collect other taxes, the sums collected remaining in the hands of the commission.

Enforcement of the Eight-Hour Law in Germany.

THE following statement regarding the enforcement of the eight-hour law in Germany is taken from a consular report from Berlin dated March 11, 1922:

To refute the charges sometimes made by foreign employers of labor to the effect that the eight-hour day in Germany is a form with but a paper existence, and that German workmen in reality are working ten or more hours a day, thereby enabling German manufacturers to throw unusually low-priced merchandise upon the world market, the General Federation of Labor has published the result of a detailed investigation into the working time of 22 trades in 29 localities.

According to figures covering 1,389,386 workers, 216,354 miners are working 42 hours per week; 8,443 workmen of various trades * * * are working 44 hours per week; 44,535 have a working week of 45 hours; 21,067 a week of 45½ hours; 235,980 a week of 46 hours; 229,128 a 46½-hour week; 31,435 a 47-hour week; 13,077 a 47½-hour week, and 589,367 a 48-hour week.

Further to prove that the eight-hour day in Germany is observed by employers, the federation points out that all wage contracts call for and are based upon eight hours of work per day, and that the strict regulations governing the limited amount of possible overtime are meticulously watched by trade-unions jealous of the rights of their members. The Federation does not say it is impossible that overtime work in excess of the hours prescribed by law sometimes is done, but it does contend that such cases are exceptional and that they are possible only in a few factories in which the unions still are poorly organized.

LABOR ORGANIZATIONS.

Understanding Between Employees' Organizations in Mining and Transportation Industries.

A CONFERENCE of representatives of the United Mine Workers of America and 15 organizations of railroad employees assembled in Chicago February 22, in response to a communication addressed to the railroad employees' organizations by the officers of the United Mine Workers. The 27th convention of the mine workers authorized its executive board to take steps toward the promotion of a closer understanding between organizations of employees in the mining and railroad industries. The conference was an outgrowth of this action on the part of the mine workers.

Representatives of the miners, of fifteen railway organizations, and of the longshoremen were present. The conference elected a committee of 5 to prepare a memorandum of understanding. This committee consisted of one representative of the mine workers, of three representatives of the railroads, and one of the longshoremen. The following memorandum was adopted unanimously by the conference, but it must be ratified by each organization represented:

ARTICLE 1. The associated organizations represented in the transportation and mining industries of the country have been compelled to bear the brunt of unwarranted attacks upon their integrity and unjust and inequitable changes in their wage schedules and conditions of employment. The industrial and financial interests responsible for this condition are not yet satisfied and are conducting gigantic propaganda looking toward further wage reductions and additional changes in working conditions that will be detrimental to the people employed in these industries. It therefore becomes necessary for the representatives of the associated organizations to assemble and take cognizance of this situation. Impelled by the necessity of effecting a coordination of our strength we declare for closer cooperation of our forces which will operate to more effectively protect the interests of those engaged in these essential and basic industries. After mature deliberation, and with a full sense of our responsibility, we declare that the mutuality of interests of the employees in these basic industries must be recognized and we assert our purpose to apply every honorable method to secure adequate compensation for service rendered and to maintain proper American standards of living.

ART. 2. When it becomes apparent that any one, or group of the associated organizations, is made the victim of unwarranted attacks, or its integrity is jeopardized, it will become the duty of the representatives of each of the associated organizations to assemble to consider the situation. Ways and means may then be considered and applied to best meet the emergency. Action taken under this section is subject to approval by each organization represented.

ART. 3. To facilitate the conduct of the business of the associated organizations, an executive committee is hereby created composed of the chief executives of the associated organizations, or their specifically designated representatives. It shall be the duty of the executive committee from time to time to make such recommendations to the associated organizations as may in its judgment be deemed wise, and to assemble the full conference of associated organizations when conditions make such action necessary.

ART. 4. This plan shall become operative when ratified by the constitutional authorities of each associated organization.

British Trade-Unions in 1919.

ACCORDING to the report[1] of the chief registrar of friendly societies the membership of British registered trade-unions for 1919 was 6,672,059 as compared with 5,427,892 in 1918 and 3,261,050 in 1914. The individual unions increased from 690 in 1914 to 716 in 1919, 599 of which were in England, 45 in Scotland, and 72 in Ireland. Despite the decrease in some groups due to the replacement of women by men in some industries there was a gain of 80,796, or 12 per cent, in the female membership of registered unions during 1919.

The total income of the trade-unions for 1919 was £9,664,922 ($47,034,343, par), the average weekly contribution per member was 6½d. (13.2 cents, par). Owing to the general industrial unrest which prevailed in 1919 the dispute benefit rose from 1s. 3d. to 7s. 2d. (30 cents to $1.74, par) per member, a larger amount than had been paid in any previous year, except 1912. Ballots taken in the various unions for the certification of political funds show that two-thirds of the members of registered unions in 1919 were organized for political purposes as well as for trade benefits. The expansion of general labor unions, the rapid development of trade-unionism among nonmanual and supervisory workers, and the tendency to amalgamation were noticeable features as regards the membership for the year. The annual returns also show that more of the unions were employing professional accountants to audit their accounts than had been the practice in former years.

[1] Great Britain. Registrar of friendly societies. Reports for the year ending December 31, 1919. Part C.—Trade-unions. London, 1921. 57 pp.

The table following shows the number of strikes and lockouts

STRIKES AND LOCKOUTS.

Strikes and Lockouts in the United States, 1916 to 1921.

DURING the past eight years the United States Bureau of Labor Statistics has kept a record of such strikes in this country as have come to its attention. The bureau has no authority to require reports relative to strikes from anyone, and therefore is obliged to obtain its information in such way as it can from such sources as are available. During these eight years this information has been obtained from agents of the bureau in the field, reports of commissioners of conciliation of the Department of Labor and other similar boards, reports of the various State labor boards, and lists of strikes issued by labor, trade, and other organizations, and from clipping bureaus, supplemented by an examination of daily papers printed in the more important industrial cities of the country, labor papers, trade-union periodicals, and leading trade papers. During the year 1921, 4,542 circulars of inquiry asking information in regard to about 2,500 reputed strikes and lockouts were sent to employers reported to have had strikes in their establishments, and to officials of unions and other persons concerned in or believed to have knowledge of labor troubles. Of this number 1,892 were returned answered in whole or in part, 110 were returned undelivered for various reasons, and the remainder were unanswered. In addition 136 letters were sent. While this report, based on the data secured from the above-mentioned sources, omitting such reputed strikes as the returned schedules of inquiry indicated had been erroneously reported, is not based on a complete list of all strikes that have occurred in the country during the years under review, for such a list is unobtainable, it is believed that no strikes of importance have failed to come to the attention of the Bureau, and that the report is reasonably complete. Revised statistics for the years 1916, 1917, 1918, 1919, and 1920 are given for purposes of comparison.

The table following shows the number of strikes and lockouts beginning in each month, 1916 to 1921:

TABLE 1.—NUMBER OF STRIKES AND LOCKOUTS BEGINNING IN EACH MONTH, 1916 TO 1921.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Month not stated.	Total.
Strikes:														
1916...	180	203	289	419	604	340	310	318	247	257	193	147	174	3,681
1917...	274	204	308	431	451	313	444	353	340	318	251	185	452	4,324
1918...	183	212	301	310	386	290	282	273	202	145	203	240	221	3,248
1919...	194	190	186	256	405	310	373	402	393	319	154	119	151	3,452
1920...	225	186	271	402	404	302	287	253	224	182	102	93	262	3,193
1921...	221	158	178	206	536	139	132	131	118	79	76	63	67	2,164
Lockouts:														
1916...	8	3	5	15	13	14	3	8	5	4	4	2	24	108
1917...	14	7	10	14	12	10	4	7	9	4	6	12	17	126
1918...	8	11	11	11	6	6	6	5	10	.....	5	10	16	105
1919...	5	8	6	14	26	12	6	10	13	8	6	6	5	125
1920...	2	6	8	4	5	2	5	6	3	7	2	4	7	61
1921...	7	10	3	18	30	7	5	8	3	5	5	2	.....	103
Total:														
1916...	188	206	294	434	617	354	313	326	252	261	197	149	198	3,789
1917...	288	211	318	445	463	323	448	360	349	322	257	197	469	4,450
1918...	191	223	312	321	392	296	288	278	212	145	208	250	237	3,353
1919...	199	198	192	270	431	322	379	412	406	327	160	125	156	3,577
1920...	227	192	279	406	409	304	292	259	227	189	104	97	269	3,254
1921...	228	168	181	284	566	146	137	139	121	84	81	65	67	2,267

The table following shows the number of strikes and lockouts in each year, 1916 to 1921, by States and by sections of the country:

TABLE 2.—NUMBER OF STRIKES AND LOCKOUTS BEGINNING IN EACH YEAR, 1916 TO 1921, BY STATES AND SECTIONS.

State or section.	Strikes.						Lockouts.					
	1916	1917	1918	1919	1920	1921	1916	1917	1918	1919	1920	1921
Alabama	14	17	13	17	25	14	1	3	.....	1	.....	.....
Alaska	3	5	2	3	1	1	.....	.....	1	.....	.....	.....
Arizona	7	20	3	7	8	3	.....	.....	1	.....	1	.....
Arkansas	20	36	11	7	15	7	.....	.....	.....	.....	.....	.....
California	54	105	92	96	115	88	1	7	2	6	5	4
Canal Zone	4	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....
Colorado	17	46	29	30	22	26	.....	2	3	1	.....	1
Connecticut	325	178	90	132	127	56	1	.....	2	3	.....	1
Delaware	12	17	14	11	10	4	.....	.....	.....	.....	.....	.....
District of Columbia	7	14	13	9	14	5	1	.....	.....	1	.....	.....
Florida	9	14	18	30	9	19	.....	2	2	.....	.....	.....
Georgia	8	26	37	33	29	16	.....	2	3	6	.....	.....
Hawaii	4	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....
Idaho	5	32	10	10	5	3	.....	.....	.....	.....	.....	.....
Illinois	149	276	237	257	248	150	10	6	11	10	4	11
Indiana	70	65	68	96	94	53	5	8	8	10	5	6
Iowa	25	63	39	51	47	37	1	2	2	6	.....	4
Kansas	15	51	40	44	14	21	.....	2	1	1	.....	.....
Kentucky	11	37	17	26	22	15	2	1	2	.....	.....	1
Louisiana	7	39	23	49	37	25	1	.....	.....	2	.....	3
Maine	30	40	36	38	22	22	.....	.....	.....	2	.....	2
Maryland	45	56	71	41	55	24	3	3	1	.....	1	1
Massachusetts	374	342	343	390	370	193	9	11	4	6	7	5
Michigan	66	62	59	84	60	66	5	2	1	.....	2	3
Minnesota	24	52	40	48	47	40	6	1	.....	1	2	4
Mississippi	4	13	4	2	4	9	.....	.....	1	.....	.....	.....
Missouri	90	117	100	67	63	52	7	5	5	2	.....	.....
Montana	14	74	32	21	15	18	1	3	1	2	1	1
Nebraska	21	27	11	17	12	11	.....	1	.....	.....	.....	.....
Nevada	.....	2	7	5	4	1	.....	.....	.....	.....	.....	.....
New Hampshire	20	20	17	33	31	6	.....	.....	.....	1	1	.....
New Jersey	411	219	138	179	140	109	6	8	.....	4	1	5
New Mexico	.....	4	2	4	1	.....	.....	.....	.....	.....	.....	1
New York	577	696	668	529	560	345	15	15	21	7	9	14
North Carolina	7	7	13	19	21	25	1	.....	1	3	.....	.....
North Dakota	.....	2	3	.....	4	8	.....	.....	.....	.....	.....	.....
Ohio	276	265	188	229	197	149	14	14	9	8	7	12
Oklahoma	24	33	17	30	22	29	.....	2	2	2	2	.....
Oregon	22	57	18	36	21	23	1	1	.....	2	1	.....
Pennsylvania	566	481	304	270	243	192	8	13	7	10	5	11
Porto Rico	23	6	5	5	6	2	.....	.....	.....	.....	.....	.....
Rhode Island	76	103	53	77	88	39	1	2	.....	1	1	2
South Carolina	5	7	3	11	5	10	.....	.....	.....	.....	.....	1
South Dakota	.....	2	3	3	5	2	.....	1	.....	.....	.....	.....
Tennessee	24	40	23	32	27	26	2	2	3	8	.....	.....
Texas	28	56	38	47	71	58	.....	.....	3	3	2	1
Utah	3	21	12	20	14	5	.....	.....	2	2	.....	.....
Vermont	10	8	9	14	12	2	.....	.....	.....	.....	.....	.....
Virginia	14	34	36	26	31	13	2	1	1	2	.....	1
Virgin Islands	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Washington	57	290	128	112	68	58	1	4	2	1	1	4
West Virginia	39	64	49	59	47	27	1	.....	1	4	2	1
Wisconsin	61	55	52	70	67	37	2	2	2	7	1	2
Wyoming	.....	2	5	4	6	4	.....	.....	.....	.....	.....	.....
Interstate	4	25	4	21	10	15	.....	.....	.....	.....	.....	1
Total	3,681	4,324	3,248	3,452	3,193	2,164	108	126	105	125	61	103
North of the Ohio and east of the Mississippi	3,106	2,949	2,400	2,607	2,342	1,452	80	85	66	71	45	75
South of the Ohio and east of the Mississippi	165	304	234	260	232	174	9	11	14	24	2	4
West of the Mississippi	406	1,046	610	564	609	523	19	30	25	30	14	23

The large increase in the number of strikes during the month of May in each year is due to the fact that the trade agreements in many industries terminate on April 30, and controversies arise at that time over wages in making new agreements.

Data for the closing months of the year 1921 are incomplete, since reports, aside from those obtained from the daily and weekly papers and periodicals, frequently do not reach the bureau until several months after the strike has ended. Corrected figures for these months, therefore, will probably show an increase over those here given.

The number of strikes in 1921 was less than in any of the five preceding years. This reduction was due largely to a lessening of strike activity during the last quarter of the year. Two and a half times as many strikes occurred in the first half of the year as occurred in the latter half. Some of the largest strikes, however, occurred during the latter part of the year.

The largest strike during the year 1921 was that of marine workers in May, involving about 140,000 strikers and embracing all the principal ports of the United States. As respects the number of persons involved in any one strike, this compares with 100,000 in 1920 (excepting the so-called outlaw railroad strikes), 435,000 in 1919, 60,000 in 1918, 40,000 in 1917 and 60,000 in 1916.

As usual, the largest number of strikes occurred in New York City, 173, followed by Chicago with 85, Philadelphia with 46, and Boston with 41.

Next to the marine strike, above mentioned, the strikes involving the largest number of persons were the following:

Cloak makers in New York City, began in November, about 60,000; meat packers, embracing many cities, began December 1, strikers variously reported as 30,000 to 50,000; waist and dressmakers in New York City, began in February, about 40,000 strikers in over 2,000 shops; building trades in Chicago, began in May, about 30,000 strikers; and the strike of some 30,000 coal miners in November in Indiana, Illinois, Ohio, etc., against the injunction abolishing the check-off system.

There were numerous other strikes in the building trades, the more important of which occurred in Cleveland, in May, involving about 27,000 men; in Westchester County, N. Y., in April, about 12,000 strikers; Philadelphia, in May, 12,000; Boston, in January, 10,000 to 15,000; San Francisco and vicinity, in May, 8,000 to 10,000, involving some 1,500 to 1,800 contractors and 17 crafts.

Some 13,000 warehouse workers struck in New Orleans on November 2, and 10,000 dock workers in New York City struck on October 1.

The strike of 10,000 cigar makers in Tampa began in November. The interstate strike of carpet makers embracing workers in Pennsylvania, New Jersey, Massachusetts and New York began January 17 and involved 10,000 strikers.

Among the coal miners there was a strike of 10,000 at Pittston, Pa., in January and another in the Panther Creek Valley of 8,000 in August; there was also the long-drawn-out strike of 9,000 to 12,000 at Pittsburg, Kans., beginning in September.

There were numerous strikes throughout the country in the printing trades for the 44-hour week, most of them beginning May 1,

the cities probably having the largest number of strikers being Chicago and Boston.

Other strikes that may be mentioned were those of 8,000 oil workers in the San Joaquin Valley of California in September, 5,000 shipbuilders in New Orleans in April; 5,500 cotton textile workers in Charlotte, N. C.; Rock Hill, S. C., etc., in June; 6,000 teamsters in Chicago in November, and 1,500 teamsters, warehousemen, etc., in New Orleans in September. The strike of 11,500 milk wagon drivers in New York City in November also attracted attention.

The threatened big railroad strike in October did not occur excepting some 600 employees of the International and Great Northern Railroad in Texas.

The largest number of industrial disputes occurred in the leading manufacturing States—New York, Massachusetts, Pennsylvania, Illinois, Ohio and New Jersey—more than one-half the strikes being in these States.

The table following shows the number of strikes and lockouts in cities in which 25 or more disputes occurred during any year, 1916 to 1921.

TABLE 3.—NUMBER OF STRIKES AND LOCKOUTS IN CITIES IN WHICH 25 OR MORE DISPUTES OCCURRED IN ANY YEAR, 1916 TO 1921.

City.	1916	1917	1918	1919	1920	1921	City.	1916	1917	1918	1919	1920	1921
Baltimore, Md.	39	36	47	26	33	20	New Orleans, La.	7	23	20	40	29	21
Boston, Mass.	62	87	68	98	51	43	New York, N. Y.	363	484	484	370	315	180
Bridgeport, Conn.	38	30	13	25	9	1	Paterson, N. J.	18	27	20	15	12	15
Buffalo, N. Y.	41	28	24	20	47	20	Philadelphia, Pa.	74	89	80	60	57	49
Chicago, Ill.	73	123	100	126	125	89	Pittsburgh, Pa.	47	37	19	19	15	22
Cincinnati, Ohio.	29	33	26	39	30	16	Providence, R. I.	21	46	18	31	32	17
Cleveland, Ohio.	60	76	39	47	40	25	Rochester, N. Y.	16	27	35	13	32	32
Denver, Colo.	8	26	19	22	15	16	San Francisco, Calif.	23	37	30	34	26	20
Detroit, Mich.	31	19	18	40	24	39	St. Louis, Mo.	58	53	70	39	40	26
Fall River, Mass.	20	13	18	28	22	10	Seattle, Wash.	15	49	29	24	26	20
Hartford, Conn.	28	21	8	17	19	2	Springfield, Mass.	31	27	12	20	27	6
Holyoke, Mass.	26	9	17	18	15	3	Toledo, Ohio.	16	16	27	24	20	15
Jersey City, N. J.	28	24	7	25	14	9	Trenton, N. J.	25	15	11	4	21	5
Kansas City, Mo.	20	36	20	16	13	16	Wilkes-Barre, Pa.	6	25	8	4	9	10
Lynn, Mass.	8	8	22	11	27	12	Worcester, Mass.	18	12	11	28	18	11
Milwaukee, Wis.	30	14	11	27	28	8	Youngstown, Ohio.	27	1	5	14	4	5
Newark, N. J.	55	50	36	33	16	22							

The table following shows, by sex of persons involved, the number of strikes and of lockouts occurring during the six years under consideration:

TABLE 4.—NUMBER OF STRIKES AND LOCKOUTS, BEGINNING IN EACH YEAR, 1919 TO 1921, BY SEX OF EMPLOYEES.

Sex.	Strikes.						Lockouts.					
	1916	1917	1918	1919	1920	1921	1916	1917	1918	1919	1920	1921
Males.	3,045	3,512	2,391	2,748	2,314	1,586	76	99	76	70	33	83
Females.	122	158	87	87	76	30	.....	.....	3	1	2	.....
Males and females.	260	184	267	498	294	511	9	6	11	23	7	17
Not reported.	254	470	503	119	509	37	23	21	15	31	19	3
Total.	3,681	4,324	3,248	3,452	3,193	2,164	108	126	105	125	61	103

The number of persons involved in strikes and lockouts is shown

In 1916 the employees were connected with unions in 2,364 strikes and 94 lockouts; they were not connected with unions in 441 strikes and 5 lockouts; in 70 strikes and 1 lockout they were not so connected at the time of striking, but organized almost immediately thereafter; in 806 strikes and 8 lockouts the relation of employees to unions was not reported. In 1917 the corresponding figures were 2,297 strikes and 95 lockouts, 206 strikes and 3 lockouts, 55 strikes, and 1,766 strikes and 28 lockouts. In 1918 the figures were 1,830 strikes and 73 lockouts, 358 strikes and 4 lockouts, 26 strikes, and 1,034 strikes and 28 lockouts. In 1919 the figures were 1,928 strikes and 102 lockouts, 141 strikes and 2 lockouts, 28 strikes and 2 lockouts, and 1,365 strikes and 21 lockouts. In 1920 the figures were 2,401 strikes and 55 lockouts, 136 strikes and 1 lockout, 8 strikes, and 648 strikes and 5 lockouts. In 1921 the figures were 1,824 strikes and 99 lockouts, 60 strikes and 1 lockout, 5 strikes, and 275 strikes and 3 lockouts.

The causes of strikes and lockouts were numerous. Aside from wages, few strikes occurred in which the cause was confined to one matter in dispute. The principal causes are shown in the table following:

TABLE 5.—PRINCIPAL CAUSES OF STRIKES AND LOCKOUTS BEGINNING IN EACH YEAR, 1916 TO 1921.

Matter of dispute.	Strikes.						Lockouts.					
	1916	1917	1918	1919	1920	1921	1916	1917	1918	1919	1920	1921
Increase of wages	1,290	1,554	1,383	1,050	1,317	116	11	17	14	24	10	2
Decrease of wages	33	34	34	83	130	830	2	2	2	3	11	36
Nonpayment of wages	13	17	31	11	20	5	.....	1	.....	.....	.....	.....
Increase of hours	3	18	6	25	8	17	4	.....	.....	.....	.....	1
Decrease of hours	111	127	79	109	62	259	2	5	.....	8	.....	4
Increase of wages and decrease of hours	479	374	254	569	263	33	2	4	2	9	3	1
Decrease of wages and increase of hours	.....	.....	.....	.....	.....	72	.....	.....	.....	.....	.....	5
Recognition of union	327	253	144	319	114	38	22	39	35	31	5	10
Recognition and wages	91	127	77	73	82	91	2	5	2	5	4	12
Recognition and hours	19	26	16	15	5	13	1	1	.....	1	1	1
Recognition, wages, hours	51	48	49	69	41	9	5	.....	.....	7	3	2
General conditions	59	100	59	70	74	66	.....	4	2	.....	.....	3
Conditions and wages	56	70	52	61	53	37	2	1	2	1	3	2
Conditions and hours	3	17	2	5	2	6	.....	1	.....	.....	.....	1
Conditions, wages, hours	25	26	8	37	43	6	.....	.....	.....	.....	.....	.....
Condition and recognition	4	13	7	14	6	4	.....	.....	.....	.....	.....	2
Discharge of foreman demanded	17	37	54	19	30	7	.....	1	.....	.....	.....	.....
Discharge of employees	122	205	138	144	139	37	5	3	.....	.....	.....	.....
Employment of nonunion men	69	78	60	12	37	23	4	1	.....	.....	.....	.....
Objectionable persons hired	1	8	2	11	22	16	.....	.....	.....	.....	.....	.....
Discrimination	9	12	32	52	29	12	.....	.....	.....	.....	2	.....
Open or closed shop	13	22	45	42	110	73	.....	.....	.....	.....	2	7
Closed shop and other causes	42	19	17	128	70	42	.....	.....	.....	.....	2	6
Unfair products	7	9	1	5	23	12	.....	.....	.....	.....	.....	.....
In regard to agreement	38	81	45	46	55	66	2	3	1	4	3	.....
New agreement	37	22	4	36	11	31	3	2	.....	.....	.....	.....
Sympathy	32	70	34	107	63	35	1	1	1	.....	.....	1
Jurisdiction	19	21	16	15	20	9	.....	.....	.....	1	.....	.....
Unsatisfactory food	4	11	1	8	2	.....	.....	.....	.....	.....	.....	.....
Miscellaneous	109	163	172	85	72	44	7	5	9	15	.....	2
Not reported	598	782	426	232	290	155	33	30	35	16	12	5
Total	3,681	4,324	3,248	3,452	3,193	2,164	108	126	105	125	61	103

The number of persons involved in strikes and lockouts is shown in the table following:

TABLE 6.—NUMBER OF STRIKES AND LOCKOUTS BEGINNING IN EACH YEAR, 1916 TO 1921, BY CLASSIFIED NUMBER OF PERSONS INVOLVED.

Number of persons involved.	Strikes.						Lockouts.					
	1916	1917	1918	1919	1920	1921	1916	1917	1918	1919	1920	1921
1 to 10	197	164	143	170	150	219	13	7	9	12	4	11
11 to 25	345	296	268	279	299	286	10	8	11	9	5	22
26 to 50	412	341	334	333	313	252	15	9	9	13	7	20
51 to 100	413	358	344	382	326	214	7	3	13	13	7	13
101 to 250	395	358	371	465	341	216	4	10	13	19	7	14
251 to 500	348	284	278	339	262	153	6	3	9	13	7	8
501 to 1,000	238	193	141	205	136	101	3	1	2	10	5	.....
1,001 to 10,000	233	219	200	323	177	126	5	4	4	9	4	6
Over 10,000	22	67	16	53	19	14	1	1	1	1	.....	1
Not reported	1,078	2,044	1,153	903	1,170	583	44	80	34	27	15	8
Total	3,681	4,324	3,248	3,452	3,193	2,164	108	126	105	125	61	103

In 1916 in 2,603 strikes and 64 lockouts the number of persons involved was reported to be 1,546,735 and 53,182, respectively, or an average of 594 in strikes and 831 in lockouts. In 1917 in 2,279 strikes and 46 lockouts the number of persons involved was reported to be 1,208,121 and 19,133, respectively, or an average of 530 in strikes and 416 in lockouts. In 1918 in 2,080 strikes and 71 lockouts the number of persons involved was reported to be 1,196,928 and 43,061, or an average of 575 and 606 respectively. In 1919 in 2,518 strikes and 94 lockouts the number of persons involved was reported to be 3,992,585 and 162,148 or an average of 1,586 and 1,725, respectively. In 1920 in 2,023 strikes and 46 lockouts the number of persons involved was reported to be 1,417,456 and 17,736, or an average of 701 and 386, respectively. In 1921 in 1,587 strikes and 95 lockouts the number of persons involved was reported to be 998,805 and 86,848, or an average of 629 and 914, respectively.

The table following gives for each year 1916 to 1921, the number of strikes and lockouts which occurred in the industries having the largest number of such disputes during the period covered:

TABLE 7.—INDUSTRY GROUPS IN WHICH THE LARGEST NUMBER OF STRIKES AND LOCKOUTS OCCURRED IN EACH YEAR, 1916 TO 1921.

Industry.	Strikes.						Lockouts.					
	1916	1917	1918	1919	1920	1921	1916	1917	1918	1919	1920	1921
Building trades	376	447	418	449	502	537	18	21	16	19	9	31
Clothing industry	222	483	418	310	275	190	5	12	18	7	16	12
Furniture industry	48	40	25	32	26	16	2	3	1	3	.....	1
Iron and steel workers	72	56	72	68	24	24	.....	.....	2	8	1	1
Leather workers	34	19	15	27	29	23	.....	.....	1	.....	3	2
Lumber industry	44	295	75	44	38	23	.....	4	1	2	.....	2
Metal trades	547	513	441	552	441	173	.....	2	.....	29	11	10
Mining	402	418	185	174	181	91	14	31	23	2	2	3
Paper manufacturing	51	39	35	44	39	40	3	2	5	3	.....	2
Printing and publishing	25	40	40	65	81	468	2	1	.....	6	2	5
Shipbuilding	27	103	136	108	45	20	4	3	4	1	.....	.....
Slaughtering and meatcutting	70	38	39	71	42	30	.....	.....	3	2	.....	.....
Stone work	59	26	14	13	29	26	2	.....	.....	.....	.....	3
Textile industry	258	242	209	264	209	113	3	5	3	9	2	.....
Tobacco	61	45	48	54	34	18	2	2	2	2	.....	1
Transportation, steam and electric	224	342	226	185	238	30	4	1	1	1	.....	1

The occupations in which the largest number of strikes and lockouts occurred in each specified year, 1916 to 1921, together with the number of disputes, are given in the table which follows:

TABLE 8.—OCCUPATIONS IN WHICH THE LARGEST NUMBER OF STRIKES AND LOCKOUTS OCCURRED IN EACH YEAR, 1916 TO 1921.

Occupation.	Strikes.						Lockouts.					
	1916	1917	1918	1919	1920	1921	1916	1917	1918	1919	1920	1921
Bakers	66	93	43	75	62	89	15	13	4	7	2	9
Boiler makers	23	43	28	31	22	15	.....	1	.....	.....	.....	1
Boot and shoe workers	44	37	48	51	59	28	1	1	2	3	4	.....
Brewery workers	19	22	27	21	24	22	2	.....	.....	2	1	1
Brick and tile workers	22	9	5	15	21	11	1	.....	.....	1	.....	1
Building laborers and hod carriers	53	72	27	49	90	10	1	2	.....	.....	.....	.....
Carpenters	73	98	78	91	72	40	2	3	3	4	1	5
Chauffeurs and teamsters	108	164	129	95	128	39	.....	.....	.....	.....	2	1
Freight handlers and longshoremen	150	179	82	54	60	36	8	15	7	2	.....	.....
Glass workers	40	20	13	9	11	2	1	3	.....	.....	.....	.....
Hat and cap makers and fur workers	22	50	34	37	46	21	4	2	4	.....	4	2
Inside wiremen	32	33	45	32	50	26	.....	.....	.....	1	1	2
Machinists	255	198	206	201	123	25	2	6	1	1	4	1
Metal polishers	40	23	24	56	74	8	3	2	5	5	4	.....
Miners, coal	370	350	156	146	161	85	3	5	6	2	.....	1
Molders	145	161	109	176	143	82	.....	4	1	5	2	7
Painters and paper hangers	45	41	58	78	46	57	1	4	3	3	.....	4
Plumbers and steam fitters	52	53	71	54	77	71	1	.....	1	1	4	4
Rubber workers	37	17	15	14	14	3	1	2	.....	1	.....	.....
Sheet-metal workers	20	32	45	19	14	77	3	1	.....	.....	.....	5
Street railway employees	55	118	117	109	81	11	1	.....	.....	1	.....	1
Structural-iron workers	23	15	19	14	32	4	.....	1	1	1	.....	1
Tailors	32	53	49	67	41	47	6	6	2	2	.....	8

In 1917, in 3,643 strikes and 113 lockouts, the number of establishments involved in each was stated. Only 1 establishment was involved in each case in 2,994 strikes and 84 lockouts, 2 establishments in 140 strikes and 3 lockouts, 3 in 69 strikes and 4 lockouts, 4 in 41 strikes, 5 in 18 strikes, over 5 in 381 strikes and 22 lockouts. In 1918, in 2,988 strikes and 105 lockouts, the number of establishments involved in each was stated. Only 1 establishment was involved in 2,461 strikes and 80 lockouts, 2 establishments in 66 strikes and 4 lockouts, 3 in 41 strikes and 1 lockout, 4 in 23 strikes, 5 in 90 strikes, and over 5 in 307 strikes and 20 lockouts. In 1919, in 3,282 strikes and 116 lockouts, the number of establishments involved in each was stated. Only 1 establishment was involved in each case in 2,048 strikes and 88 lockouts, 2 establishments in 138 strikes and 4 lockouts, 3 in 99 strikes, 4 in 56 strikes and 3 lockouts, 5 in 50 strikes and 2 lockouts, and over 5 in 891 strikes and 19 lockouts. In 1920 in 2,528 strikes and 61 lockouts the number of establishments involved in each was stated. In each case only 1 establishment was involved in 1,908 strikes and 37 lockouts, 2 establishments in 84 strikes and 2 lockouts, 3 in 57 strikes and 1 lockout, 4 in 39 strikes and 1 lockout, 5 in 35 strikes, over 5 in 405 strikes and 20 lockouts. In 1921, in 1,803 strikes and 89 lockouts, the number of establishments involved in each was stated. In each case only 1 establishment was involved in 972 strikes and 40 lockouts, 2 establishments in 106 strikes and 5 lockouts, 3 in 89 strikes and 2 lockouts, 4 in 58 strikes and 4 lockouts, 5 in 41 strikes and 2 lockouts, over 5 in 537 strikes and 36 lockouts.

Tables 9, 10, and 11 relate to those strikes and lockouts which were reported to have ended during the six years under consideration:

TABLE 9.—NUMBER OF STRIKES AND LOCKOUTS ENDING IN EACH MONTH, 1916 TO 1921.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Month not reported.	Total.
Strikes:														
1916...	114	129	173	289	330	213	200	213	217	171	151	76	119	2,395
1917...	108	92	155	191	214	168	155	153	196	175	120	128	161	2,016
1918...	103	124	162	198	258	218	205	204	170	141	113	162	76	2,134
1919...	120	111	123	136	218	188	202	246	231	186	144	115	76	2,096
1920...	81	81	126	193	195	180	180	147	152	109	69	51	135	1,699
1921...	57	51	93	97	204	159	137	128	83	75	51	41	233	1,409
Lockouts:														
1916...	3	3	3	3	7	3	.....	4	6	2	5	2	12	53
1917...	3	2	4	7	9	4	2	3	5	2	2	4	11	58
1918...	2	1	6	10	3	5	6	3	5	6	4	4	9	64
1919...	2	2	5	8	8	7	5	6	8	8	3	5	4	71
1920...	2	4	3	1	2	3	4	2	1	2	1	4	.....	29
1921...	.....	2	2	3	15	8	5	5	5	6	6	1	12	70
Total:														
1916...	117	132	176	292	337	216	200	217	223	173	156	78	131	2,448
1917...	111	94	159	198	223	172	157	156	201	177	122	132	172	2,074
1918...	105	125	168	208	261	223	211	207	175	147	117	166	85	2,198
1919...	122	113	128	144	226	195	207	252	239	194	147	120	80	2,167
1920...	83	85	129	194	197	183	184	149	153	111	70	55	135	1,728
1921...	57	53	95	100	219	167	142	133	88	81	57	42	245	1,479

In the table which follows are given the data relative to the results of strikes and lockouts ending in each year, 1916 to 1921:

TABLE 10.—RESULTS OF STRIKES AND LOCKOUTS ENDING IN EACH YEAR, 1916 TO 1921.

Result.	Strikes ending in—						Lockouts ending in—					
	1916	1917	1918	1919	1920	1921	1916	1917	1918	1919	1920	1921
In favor of employers	729	382	459	661	633	651	21	13	6	19	10	28
In favor of employees	733	614	612	567	365	221	16	17	15	16	7	12
Compromised	766	699	674	785	435	268	11	21	17	12	6	11
Employees returned pending arbitration	70	131	199	47	59	79	3	6	5	3	2	1
Not reported	99	190	190	36	207	190	2	1	21	21	4	18
Total	2,395	2,016	2,134	2,096	1,699	1,409	53	58	64	71	29	70

In 1916 the total duration of the strikes was 46,305 days and of the lockouts 3,375 days, the average duration of the former being 22 days and of the latter 64 days. In 1917 the total duration of these strikes was 25,077 days and of the lockouts 1,904 days, the average duration of the former being 18 days and of the latter 56 days. In 1918 the total duration of these strikes was 28,779 days and of the lockouts 1,116 days, the average of the former being 17 days and of the latter 19 days. In 1919 the total duration of the strikes was 60,715 days and of the lockouts 2,215 days, an average of 34 days and 37 days, respectively. In 1920 the total duration of the strikes was 47,508 days and of the lockouts 1,376 days, an average of 38 days and 69 days, respectively. In 1921 the total duration of the strikes was 56,101 days and of the lockouts 4,064 days, an average of 49 and 71 days, respectively.

TABLE 11.—DURATION OF STRIKES AND LOCKOUTS ENDING IN EACH YEAR, 1916 TO 1921.

Duration.	Strikes ending in—						Lockouts ending in—					
	1916	1917	1918	1919	1920	1921	1916	1917	1918	1919	1920	1921
Less than 1 day	38	88	84	29	31	32	.....	.....	.....	.....	.....	.....
1 day	141	194	145	76	57	25	.....	2	.....	.....	.....	1
2 days	183	111	170	69	64	42	2	2	1	1	.....	.....
3 days	146	102	127	80	53	43	1	3	.....	.....	1	1
4 days	124	61	111	78	50	43	1	1	.....	.....	.....	1
5 days	130	55	71	73	36	32	1	1	1	1	.....	1
6 days	109	65	67	45	42	32	3	.....	.....	.....	.....	.....
7 days	91	93	113	67	63	41	2	2	2	2	1	2
8 days	85	29	59	71	45	27	1	.....	1	1	.....	1
9 days	48	29	38	33	30	18	2	2	.....	.....	.....	1
10 days	106	42	56	55	30	40	2	1	2	2	.....	3
11 days	40	24	24	80	28	18	1	.....	.....	.....	.....	1
12 days	42	39	25	26	23	11	.....	.....	1	2	1	1
13 days	26	13	17	30	21	14	1	.....	.....	.....	.....	.....
14 days	61	39	49	42	36	24	3	1	.....	.....	2	.....
15 to 18 days	142	74	84	109	82	69	6	1	4	4	.....	3
19 to 21 days	82	44	67	90	23	42	1	2	5	5	2	2
22 to 24 days	39	22	37	48	37	16	1	1	3	3	1	.....
25 to 28 days	60	32	32	65	52	30	1	3	.....	.....	1	1
29 to 31 days	53	28	57	66	43	31	.....	.....	8	8	1	6
32 to 35 days	25	27	28	58	18	34	.....	.....	3	3	1	1
36 to 42 days	48	37	37	79	43	50	2	1	2	2	1	2
43 to 49 days	22	26	32	74	48	37	2	3	4	4	.....	3
50 to 63 days	53	37	40	116	64	77	.....	.....	8	8	3	5
64 to 77 days	39	19	16	70	47	57	1	3	2	2	1	3
78 to 91 days	26	11	15	55	38	55	1	1	2	2	.....	3
92 to 199 days	87	51	28	142	117	165	12	4	7	7	2	11
Over 200 days	17	9	21	19	41	42	6	.....	3	3	2	4
Not reported	332	615	484	301	437	262	.....	24	5	11	9	13
Total	2,395	2,016	2,134	2,096	1,699	1,409	53	58	64	71	29	70

Included in the above table as "not reported" are 200 strikes and 3 lockouts in 1917, 127 strikes and 4 lockouts in 1918, 81 strikes and 2 lockouts in 1919, and 76 strikes in 1920, designated in the reports as "short," but their exact duration not being given.

In addition, there were, in 1917, 95 strikes and 1 lockout; in 1918, 79 strikes and 8 lockouts; in 1919, 175 strikes and 13 lockouts; in 1920, 125 strikes; in 1921, 52 strikes and 2 lockouts, in which the places of the employees were filled very soon after the trouble occurred, and the work became normal in a few days, but the bureau has no record that these disturbances were ever formally settled. There were also in 1921, 76 strikes and 5 lockouts of unknown duration that were ended, so far as the establishments were concerned, by some of the old employees returning and by the taking on of new employees and the establishments either maintaining or inaugurating the principle of the open shop. About one-third of these were in the printing and allied trades.

In 1917 the number of unauthorized strikes of which the bureau has information was 72 and in 1918, 58. In 1919 the number was 125, involving 1,053,256 strikers; in 1920 the number was 253, involving 850,837, and in 1921 the number was 52, involving 66,804. Between April 6, 1917, the date of our entrance into the war, and November 11, 1918, the date of signing the armistice, 6,205 strikes and lockouts occurred.

Strikes in Czechoslovakia.[1]

THE general strike of the coal miners in Czechoslovakia (see MONTHLY LABOR REVIEW, April, 1922, p. 217), which started on February 3, 1922, was officially declared at an end on February 10. The miners are now back at work. The collective agreement between the operators and the miners which expired on December 31, 1921, is to remain in force until August 1, 1922. Commissions have been appointed for the purpose of determining whether the alleged decrease in the cost of living warrants a cut in wages. Each mining district is to have its own commission, as the various districts in Czechoslovakia require special attention to their particular needs. The operators, and the miners are to be equally represented on these commissions, with impartial chairmen elected by the members, and if such chairmen can not be agreed upon the Government will appoint them.

Such commissions as described above have been in existence for some time in the coal districts of Moravska, Ostrava, and Rosice.

The commissions, under the terms of the agreement between the operators and the miners, were to make their preliminary reports by the end of February at least.

General Strike in the Glass Industry.

ON MARCH 13, 1922, the workers in all the glass factories of Czechoslovakia stopped work. The number of strikers is reported as between 60,000 and 70,000. The strikers demand that the old collective contract of payment remain unchanged in force. Employers, on the other hand, insist upon the enforcement of a new collective contract providing for a reduction in wages of at least 20 per cent. The strikers refuse to return to work without the assurance that the old contract will remain in force, and the employers refuse to negotiate on any basis other than the reduction of wages. The result is a deadlock.

Railroad Strike in Germany.[2]

DURING the first week of February Germany was in the grip of a general railroad strike which had disastrous effects on both the economic and the political conditions of the country. The circumstances that led up to the strike began with demands for wage increases submitted to the Government by the Federation of German Officials (*Deutscher Beamtenbund*) jointly with the central trade-union organizations of manual workers and salaried employees. These demands were submitted on December 3, 1921, only a few days after the promulgation of the law relating to salary and wage increases for officials, salaried employees, and workmen of public corporations which involved increases retroactive to October 1, 1921, in a total amount of 15,000,000,000 marks ($3,570,000,000, par) to be borne by the nation, the States, and the communes. The new

[1] Consular reports from Prague dated Feb. 21 and Mar. 17, 1922.

[2] Compiled from articles on the subject in Soziale Praxis und Archiv fur Volkswohlfahrt, Berlin, Feb. 22, 1922; Industrial and Labor Information, International Labor Office, Geneva, Feb. 17, 1922; and communications from the American consulates at Hamburg, Munich, and Breslau.

demands which culminated in a further increase in the basic salaries of officials by from 50 to 70 per cent and of workmen's wages by 73 per cent, with retroactive force, would have required an additional total expenditure on the part of public corporations of between fifty and sixty billion marks ($11,900,000,000 to $14,280,000,000, par). In his reply to the Federation of German Officials the Federal minister of finance stated that it was impossible to grant these demands which had been made without the required consideration of the general economic situation of the nation, of other classes of the population, of the financial condition of the country, and of the foreign political situation. Thereupon the organizations withdrew their demands with respect to the amount of wage increases.

At the beginning of 1922 the Government resumed negotiations with the central organizations with a view to equalizing salaries in those districts in which the cost of living was especially high. Statutory officials (*Beamte*) were promised an increase in the cost-of-living bonus of 2,000 marks ($476, par) per year and their organizations seemed to be satisfied with this offer. During the new negotiations there had also been made a demand for automatic adjustment of salaries and wages to the cost of living, but this demand was withdrawn for the time being. A Government bill drafted on the basis of these negotiations had been approved by the Reichstag on January 21. On this occasion the Federal minister of finance made a declaration promising in the near future a thorough investigation by the Government of all salary problems, consideration of the introduction of sliding wage scales, the granting of extra cost-of-living bonuses, and consideration of the family conditions of civil servants in fixing their salaries. The committee of the Reichstag had already in several of its sessions discussed these problems and the Federal minister of finance had come to an understanding with the representatives of the individual Federal States when the National Union of German Railroad Employees (*Reichsgewerkschaft Deutscher Eisenbahnbeamter*) on January 26 presented to the Government and Reichstag an ultimatum which contained all the demands made on December 3 of last year and in addition the new demand that all the decrees and orders restricting the provisions of the eight-hour law within the railroad service be repealed and the Government bill on the regulation of the hours of labor be withdrawn as it involved unjustified discrimination against the railroad employees. The ultimatum stated that unless the Government gave binding assurance within five days that all these demands would be granted the National Union of Railroad Employees would call a strike "as this was the only trade-union weapon left to them."

Confronted by this ultimatum the Government on January 30 published through the medium of the Wolff Agency (the largest German press bureau) a statement reviewing the recent negotiations with the railroad men's organizations and the promise made in the Reichstag on January 21 to reconsider the possibility of wage increases, and replying to the threat of the National Union of Railroad Employees by a demand that every railway employee should do his duty. Those who failed to execute the duties assigned to them would be severely punished, while every employee who remained at his post would be granted full protection by the Government.

National Strike Begins on February 1.

IN SPITE of the warnings of the Government and the unsympathetic attitude of the public, including considerable numbers of civil servants and workers in private employment, the National Union of Railroad Employees by a small majority of votes declared a national strike to begin on February 1. The strike movement affected particularly the locomotive engineers. The number of strikers was estimated at 200,000, including 50,000 at Berlin. The strike was by no means general. The chief strike centers were in northern and western Germany and in Saxony. In the south, especially in Bavaria, the strike met with very little support. In Bavaria railroad officials and employees did not join the strike and remained at their posts throughout. Their loyalty is generally and officially attributed to sounder judgment and a clearer perception of the duties of public servants and of the disastrous effects of the strike on Germany's general political and economic situation. Whether the strength of the Bavarian administration and the fear of reactionary repressive measures may also have played a part in the attitude of the Bavarian railroad employees is difficult to determine.

Attitude of the Government.

THE attitude of the Government toward the strikers was very firm. As soon as the Government had received the news that a national strike had been called by the Railroad Employees' Union, the President issued the following order:

In pursuance of article 48, paragraph 2, of the national constitution and with a view to restoring public order and safety within German territory, it is herewith ordered:

ARTICLE 1. In pursuance of the civil service laws in force officials of the national railroads as well as all other public officials are forbidden to strike or to refuse the performance of work assigned to them. Whoever requests or incites an official of the national railroads to strike or to refuse the performance of work assigned to him shall be punished with imprisonment or a fine up to 50,000 marks ($11,900, par) or with both. Likewise shall be punished whoever commits any act involving forbidden stoppage or refusal to work on motive power, rolling stock, machinery, supplies, or other equipment and plants which makes impossible or difficult the orderly operation of the national railroads.

ART. 2. If the operation of the national railroads is being totally or partially stopped or made difficult by illegal stoppage or refusal to work the Federal minister of transportation shall have authority to take all measures suited for bringing about continuance of operation.

ART. 3. Officials, employees, and workmen who continue work in the operation of the national railroads or execute emergency work shall not be discriminated against economically. Whoever demands or incites to such discrimination shall be punished with imprisonment or a fine up to 50,000 marks ($11,900, par) or with both.

ART. 4. This order becomes effective February 1, 1922.

Simultaneously with the promulgation of this order of the President the administrative authorities in Berlin and in other administrative centers issued regulations for the enforcement of this order, which, among other things, had as a consequence the confiscation of bank balances of the National Union of Railroad Employees and the arrest of several officers of this union.

With the aid of loyal officials, employees, and workmen—only in a few localities did the members of the Free (Social-Democratic) Railroad Workers' Federation join the strike—and the calling in of the

the Federal chancellor, Dr. Wirth, in which the latter had

"Emergency Engineer Corps" (*Technische Nothilfe*) [3] the Government succeeded in maintaining on the main lines the most necessary traffic, especially the transport of coal, milk, and other foodstuffs.

Attitude of the Press, Public, and Labor Organizations.

THE press, the political parties in the Reichstag, and the great labor organizations, with few exceptions, refused to give material or moral support to the strike. The nonsocialist press unanimously condemned the strike and minimized its seriousness. Most of the socialist papers took a middle position and strove to maintain an attitude of neutrality. They deplored the strike on the ground that it cut short the promising negotiations already begun. Some of them denied that Government employees have a right to strike, but on the other hand condemned the Government's public threat to punish the strike leaders with imprisonment and the seizure of strike funds. The communist organs were the only ones which enthusiastically approved and supported the strike and fiercely abused the Government. They urged that a general strike be called in order to compel the Government to surrender to the demands of the strikers.

The noncommittal and subsequently disapproving attitude of the trade-unions, especially of the General Federation of German Trade-Unions (*Allgemeiner Deutscher Gewerkschaftsbund*), the largest central labor organization in Germany, gave to the Government support in its defensive movement and ultimately played no small part in the final failure of the strike. The trade-unions were fully aware of the injurious effects of this arbitrarily called strike and in addition they were influenced in their attitude by the fact that the National Union of Railroad Employees had disregarded all rules of trade-union strike tactics. Not only had the officers of that union omitted to confer with the other organizations of railroad officials, employees, and workers, but the resolution to call a strike was adopted by such a small majority that the central trade-union organizations saw in the calling of the strike a disregard of recognized trade-union principles. The principal underlying reason for the attitude of the General Federation of German Trade-Unions is said, however, to have been the following: The National Union of Railroad Employees is affiliated with the Federation of German Officials (*Deutscher Beamtenbund*). The General Federation of Trade-Unions has made repeated unsuccessful attempts to bring about cooperation with the Federation of German Officials. In refusing its support to the railroad strike the General Federation of Trade-Unions, according to Soziale Praxis, had also the ulterior purpose of forcing the Federation of German Officials into a cooperative alliance, or, as the Münchner Neueste Nachrichten put it, the General Federation of Labor wishes to undermine the loyalty of the old German officialdom and convert not only railroad employees, but also other public servants into a proletariat organized in unions subservient to the political aims of the socialists.

Settlement of the Strike.

NOT only did the trade-union organizations refuse to support the strike, but they also made strenuous efforts to bring about a settlement of the dispute. After several interviews with the President and

[3] See article in MONTHLY LABOR REVIEW, April, 1920, pp. 229–231, on the organization of this corps.

the Federal chancellor, Dr. Wirth, in which the latter had promised that the presidential order would be abrogated after the termination of the strike, the central trade-union organizations issued a proclamation requesting the immediate resumption of work by the railroad employees. This proclamation was signed by the General Federation of German Trade-Unions, the Federation of Christian Trade-Unions (*Deutscher Gewerkschaftsbund*), the League of German Manual Workers', Employees' and Officials' Federations (*Gewerkschaftsring Deutscher Arbeiter-, Angestellten-, und Beamtenverbände*), and the General Federation of Commercial and Clerical Employees (*Allgemeiner Deutscher Angestelltenbund*). The officers of the Federation of German Officials, who did not sign the proclamation, were received by the Federal chancellor in the presence of representatives of the General Federation of German Trade-Unions and made the declaration that they did not approve the strike. This declaration on the part of the officials' federation does not correspond with its attitude during the strike, for although it did not directly sanction the strike, it said in its organ "Gemeinschaft" that article 1 of the presidential strike order was based on a misconception of the law, as article 159 of the German constitution granted the unrestricted right of combination. The officials' federation evidently but wrongly assumed the right of combination to be synonymous with the right to strike. On the assurance by the chancellor that negotiations as to the hours of labor of railroad employees and their basic wage rates and bonuses would shortly be resumed, the Federation of German Officials declared itself also in favor of ending the strike.

On February 8 negotiations began between the Government and the representatives of the manual and nonmanual workers' organizations, with the result that the representatives of the strikers agreed to instruct their comrades to resume work that day. The strikers had demanded a complete amnesty, but this was not granted. The Government promised not to discharge the mass of strikers, but reserved the right to take disciplinary measures against the strike leaders.

The strike was discussed in the Reichstag on February 9. The chancellor pointed out that the chief question involved was not one of an economic character. It was not a question of hours of employment, but the right of workers in Government employment to strike. He said: "The refusal of part of the employees in the service of the national railroads to perform their duties is an act which in economic life is generally called a strike, but which I do not hesitate to brand with the sharp term of a revolt of officialdom." Continuing, he stated that the Governments of all the Federal States were unanimous in considering that civil servants have not the right to strike, because they form part of the Government and the administration. A civil servant must fulfill his duties conscientiously and this obligation excludes the right to take part in a collective stoppage of work. Most Government employees have permanent appointment, their rights are guaranteed and protected by the constitution, and these privileges are incompatible with the right to strike.

The Chancellor finally requested a vote of confidence. The vote, which was taken on February 15, showed that 220 members of the Reichstag, including the majority socialists, approved the attitude of the Government toward the strike, while 185 members disapproved it.

Economic Loss Caused by the Strike.

IT IS now known that the Federal minister of transportation estimates the loss of income during the days of the strike at 1,800,000,000 marks ($428,400,000, par), and the destruction of material at about 500,000,000 marks ($119,000,000, par). To this must be added the expenditure for the "emergency engineer corps," so that the nation suffered a loss of approximately 2,500,000,000 marks ($595,000,000, par).

The Deutsche Zeitung of February 8 says:

> Considerable time will pass before an adequate railroad service can be thought of. It has been learned that some strikers ran their engines on a sidetrack and left them standing without drawing the water out of the boilers, and that as a result of freezing, tubes of many boilers require attention. There will be many expensive repairs to be made before the locomotives can be brought to the same degree of efficiency as before the strike.
>
> The effect of the strike on international commercial traffic, as was expected, was immediately felt on the German borders. According to a message received from Amsterdam, the suspension of the German postal service with foreign countries has already occasioned extraordinary difficulties for Dutch trade. It can not be determined at present whether the delays in the delivery of German goods can be compensated or overcome in the next two months. English commercial houses value the worth of German goods which should have been delivered in February at from 100,000,000 to 120,000,000 marks ($23,800,000 to $28,560,000, par). In many cases these were season articles which had to be shipped again from England to oversea countries.

A strike of municipal workers in Berlin which lasted a few days only aggravated in that city the consequences of the railroad strike, as it was deprived of light, means of transport, and even water.

Rôle Played by the "Emergency Engineer Corps."

THE collapse and failure of the railroad strike was chiefly due to the efficient aid given to the Government by the official strike-breaking corps, the "Emergency Engineer Corps" (*Technische Nothilfe*). The corps, which is under the jurisdiction of the National Ministry of Defense, is composed of technical experts, skilled, and unskilled workers. The amount of 40,000,000 marks ($9,520,000, par) has been appropriated for its maintenance during the present fiscal year. The corps intervenes only when industrial establishments of vital importance are about to be crippled by political strikes—establishments, that is, which supply the public with transportation, gas, electricity, water, foodstuffs, etc.

During the railroad strike this corps made it possible to maintain an emergency service on all main lines, i. e., some of the most important through passenger trains, as well as coal, milk, and food trains, were kept running during the entire period of the strike. The corps is passionately hated by the trade-unionists but even trade-union journals acknowledge its efficiency. Significant in this respect is an article in the Korrespondenzblatt (Berlin, March 4, 1922), the official organ of the General Federation of German Trade-Unions, of which the following is an extract:

> As some time has elapsed since the termination of the railroad strike we can now consider calmly and pertinently the question of the emergency engineer corps. It must be admitted that during the two and one-quarter years of its existence the corps has achieved some merit in preserving public property. It is to be regretted that great ignorance prevails in workmen's circles about this child of the revolution.

The principles by which intervention of the corps is governed, how it is financed, its organization, and last, but not least, its development are matters of which most workmen know practically nothing. Out of purely instinctive hatred, out of the perception that the bourgeois class has created for itself a tool for the combating of the working class, the corps is being boycotted by the workers. This boycott adds, however, to the corps' strength. The more the working class fails to secure for itself influence within the emergency corps, the more will this corps become a tool of reaction. That Social-Democrats occupy places in the cabinet does not change this fact, because the leaders and workers of the emergency corps come from circles which have formerly combated the working classes and which even now do not understand the demands of the latter. The leading posts in the emergency corps are occupied by former army and navy officers and ships' engineers, while the actual emergency workers are recruited from among students of the high schools, colleges, and universities, and members of the nonmilitant (yellow) and Christian trade-unions. The relatively high salaries paid by the corps make it possible for the corps to employ a number of efficient organizers.

Within a brief period and very quietly an apparatus has been created which is able to protect the economic life of Germany, even in its most remote localities, from the full effects of strikes in establishments of vital importance to the general public. The organization of the corps is so perfect that a whole army of emergency workers can within a few hours be called in, transported from one locality to another, and provisioned. It should furthermore be noted that during each extensive strike volunteers from all strata of the population offer their services to the corps at its recruiting offices and that in nearly all instances in which the corps intervenes it commands the sympathy of the bourgeois class and often also of large circles of the working classes, for even the strikers themselves can not do without such necessaries as water, gas, electricity, transportation, etc., which the emergency corps workers provide.

The great danger to the working class does not lie in the intervention of the emergency corps in minor strikes but in the fact that, in addition to the national army (*Reichswehr*) upon which the trade-unions and the labor parties have no influence, there exists another large organization which with the aid of the bourgeoisie can make ineffective the last weapon of the worker, the political general strike. When the working people have become fully cognizant of this danger they must combat the emergency corps with other means than those employed hitherto.

South African Miners' Strike.

THE strike of miners which has existed in the gold mines of the Witwatersrand and in the Transvaal collieries since the beginning of the year originated, according to a recent statement[1] of the Chamber of Mines, in a proposed reduction of wages in the gold mines scheduled to go into effect February 1, 1922, and necessitated by the declining price of gold from 130s. ($31.63, par) per fine ounce in February, 1920, to below 95s. ($23.12, par) at the time the statement was made, and the increasing costs of production. Native wages, the report states, have risen only 9 per cent above the pre-war scale, while the wages of the European employees of the gold mines, excluding the staff, have risen from an average of £308 ($1,499, par) per annum in 1914 to £478 ($2,326, par) per annum in 1920, a gain of 55 per cent. Meanwhile the costs of production range from 39s. 6d. ($9.61, par) per ounce to 110s. 10d. ($26.97, par) per ounce according to the mine. In 27 out of the 39 gold mines on the Reef the costs range from 80s. 6d. ($19.59, par) to 110s. 10d. ($26.97, par). If gold continues to fall until the normal price of 84s. 11d. ($20.66, par) is reached only 17 mines will survive. It was by a reduction in

[1] Transvaal. Chamber of Mines. The crisis on the Rand goldfields. Johannesburg, Feb. 13, 1922. 31 pp.

the cost of European labor that the mines expected to offset losses and prolong the life of the low-grade mines. The white miners maintained that wages should not be lowered, and in some cases should be increased. For several weeks negotiations were carried on between the South African Industrial Federation and the Chamber of Mines, involving the questions of wage reductions, the proportion of white to colored labor, and the reorganization of underground work.

The coal and diamond mines, the gold mines of the Witwatersrand, in fact practically every phase of the mineral industry in South Africa, depends upon the adequacy of the supply of native labor. These natives, engaged for periods of 18 months or two years, live, during the period of their employment, in compounds on the mining properties and at the conclusion of their contracts return to their native "kraals," their places being taken by new recruits. For some years there has been a shortage in the supply of native workers, and the Low Grade Mines Commission in a recent report recommended the recruiting of natives north of latitude 22°. There are at present employed in the gold, coal, and diamond industry of South Africa 261,834 natives as compared with 37,391 whites. The presence of this large number of native workers has limited the white workers to the more highly skilled positions, such as supervising and controlling the unskilled colored laborers.[2]

When the Chamber proposed to fix for gold mine labor the average ratio of 1 European to 10.5 colored, a decrease from an average of 1 to 8, the question of the "color bar" which has long been a controversial one in South African labor ranks developed into a prominent issue in the dispute. Negotiations proving fruitless, a strike was called January 10, 1922. In the succeeding weeks coal and iron miners as well as other bodies of workers became involved.

The prolongation of the strike was marked by acts of violence between the strikers and the police and especially between white and native workers, some of the latter having continued to work under Government protection, resulting in losses in killed and wounded on both sides. Following the calling of a general strike by the augmented executive of the South African Industrial Federation martial law was proclaimed on March 10, 1922, and effective measures were taken to put an end to a deplorable situation. On March 15 the strike was called off. Lack of unity in labor ranks regarding the dispute and particularly the methods employed to carry it on is evidenced by an announcement made by the old South African Industrial Federation as distinct from the Federation's augmented executive as follows:

First. That the general strike was null and void.

Second. That the augmented executive is to call off the mine strike.

Third. That complicity in the revolution against the Government is repudiated by the Federation.[3]

The original causes of the dispute will be referred for investigation and settlement to an impartial tribunal to be appointed by the premier.

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[2] Consular report, No. 53772, dated Mar. 9, 1922.
[3] Christian Science Monitor, Mar. 16, 1922, p. 1.

CONCILIATION AND ARBITRATION.

Conciliation Work of the Department of Labor in March, 1922.

By Hugh L. Kerwin, Director of Conciliation.

THE Secretary of Labor, through the Division of Conciliation, exercised his good offices in connection with 21 labor disputes during March, 1922. These disputes affected a total of 31,185 employees. The table following shows the name and location of the establishments or industries in which disputes occurred, the nature of the disputes (whether strike, lockout, or controversy not having reached strike or lockout stage), the craft or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workmen directly or indirectly affected.

On April 1, 1922, there were 31 strikes before the department for settlement and in addition 9 controversies which had not reached the strike stage. Total number of cases pending, 40.

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS DIVISION OF CONCILIATION, MARCH, 1922.

Company or industry and location.	Nature of controversy.	Craft concerned.	Cause of dispute.	Present status.
Six garment shops, Harlem, New York City.	Strike.....	Shirt makers....	Wage cut.....	Adjusted.
Apollo Hall, Philadelphia, Pa.....	Controversy.	Culinary.....	Open shop.....	Do.
Web printing pressmen, all papers, New York City.	Strike.....	Printing.....	Working conditions.	Do.
Corn Belt Packing Co., Dubuque, Iowa.	.....do.....	Packing.....	Discrimination.....	Do.
Timber, Klamath Falls, Oreg.....	.....do.....	Timber workers.	9 to 10 hour day.....	Pending.
Bakers, Worcester, Mass.....	Controversy.	Bakers.....	.....	Do.
Hayes Iona Co., Grand Rapids, Mich.	Strike.....	Painters.....	Overtime.....	Do.
Haytock-Cronemeyer Silk Co., Northampton Silk Co., Easton, Pa.; Continental Silk Co., Reynolds-Tirrell Silk Co., Phillipsburg, N. J.	.....do.....	Silk workers....	Wage cut.....	Adjusted.
Stanley Iron Works, Bridgewater, Mass.	.....do.....	Molders.....	.....do.....	Pending.
Cigar makers, Delphos, Ohio.....	.....do.....	Cigar.....	.....do.....	Do.
Carpenters, Middleboro, Mass.....	.....do.....	Carpenters.....	.....do.....	Do.
Three mills, Barbour Flax Co., Paterson, N. J.	.....do.....	Spinners.....	44 to 50 hours.....	Do.
Dolphin Jute Mills, Paterson, N. J....	.....do.....	Textile workers.	Hours.....	Do.
Johnson, Cowdin & Co., Paterson, N. J., and Norwalk, Conn.	.....do.....	Silk workers....	Wage cut.....	Do.
House wreckers, New York City.....	Controversy.	House wreckers.	Wages.....	Adjusted.
Hyman Kaufman, New York City...	Strike.....	Garment.....	Reduction of force..	Unable to adjust.
Keith Theatre Bldg., Cleveland, Ohio.	Controversy.	Plumbers.....	Working conditions.	Adjusted.
Wilson Packing Co., Chicago, Ill.....	.....do.....	Machinists.....	Discrimination.....	Pending.
Mather Car Co., Chicago, Ill.....	.....do.....	Employees.....	Wage cut.....	Adjusted.
Miners, Kentucky-Tennessee.....	.....do.....	Miners.....	Abrogation of contract.	Pending.
Gold-leaf beaters, New York, Chicago, Boston, Philadelphia.	.....do.....	Gold leaf.....	Wage cut of 25 per cent.	Adjusted.

sign until it was modified. In a modified form the bill was approved

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS DIVISION OF CONCILIATION, MARCH, 1922—Concluded.

Company or industry and location.	Terms of settlement.	Date of—		Workmen affected.	
		Beginning.	Ending.	Directly.	Indirectly.
Six garment shops, Harlem, New York City.	10 per cent cut accepted	Feb. 18	Mar. 3	600	0
Apollo Hall, Philadelphia, Pa	Detailed agreement	Dec. 12	Dec. 30	240	0
Web printing pressmen, all papers, New York City.	Agreed on arbitration	Mar. 1	Mar. 2	1,600	10,000
Corn Belt Packing Co., Dubuque, Iowa.	Company agreed to reinstate	Mar. 11	Mar. 16	90	200
Timber, Klamath Falls, Oreg		Feb. 28		467	918
Bakers, Worcester, Mass					
Hayes Iona Co., Grand Rapids, Mich.	Company closed shop	Mar. 14		64	0
Haytock-Cronemeyer Silk Co., Northampton Silk Co., Easton, Pa.; Continental Silk Co., Reynolds-Tirrell Silk Co., Phillipsburg, N. J.	Silk Twisters' Union accepted reduction of 5 and 9 per cent.	Mar. 11	Mar. 28	23	688
Stanley Iron Works, Bridgewater, Mass.					
Cigar makers, Delphos, Ohio					
Carpenters, Middleboro, Mass				80	0
Three mills, Barbour Flax Co., Paterson, N. J.	2 plants closed	Feb. 20		900	0
Dolphin Jute Mills, Paterson, N. J.	Mill closed indefinitely	do		500	0
Johnson, Cowdin & Co., Paterson, N. J., and Norwalk, Conn.		Mar. 6		478	0
House wreckers, New York City	Agreement renewed, 1 year	do	Apr. 1	2,000	4,000
Hyman Kaufman, New York City	Strike lost	Dec. 17	Mar. 15	120	0
Keith Theatre Bldg., Cleveland, Ohio.	Contract relet, union contractor	Mar. 14	Mar. 29	26	250
Wilson Packing Co., Chicago, Ill				24	2,167
Mather Car Co., Chicago, Ill	Reduction accepted, 10 and 15 per cent.	Mar. 1	Mar. 28	210	20
Miners, Kentucky-Tennessee		Mar. 20		5,000	200
Gold-leaf beaters, New York, Chicago, Boston, Philadelphia.	Cut accepted, 25 per cent	Mar. 27	Mar. 30	400	0
				12,742	18,443

Use of Federal Power in Settlement of Railway Labor Disputes.

BULLETIN No. 303 of the Bureau of Labor Statistics, just issued, bears the title "Use of Federal power in settlement of railway labor disputes." This report, prepared by Dr. C. O. Fisher, associate professor of economics in Wesleyan University, embraces a history of Federal intervention in railway labor disputes from 1888, when the first legislation was enacted, until October 1, 1921, after the transportation act had been in operation for more than a year.

The study consists of an examination of Government methods, which found expression in five statutes dealing with railway labor disputes, and of Government experience as exemplified in the operation of those laws.

The bulletin treats in some detail of the events leading up to the passage of these laws, of their operation, and of the attitude of the various interests affected thereby.

As early as 1882 Congress began the consideration of methods and devices for the settlement of labor disputes on the railways, and a committee was appointed to investigate the causes of labor troubles and to report remedies therefor. In 1886 a bill was introduced, which was passed by both houses, but which President Cleveland failed to

sign until it was modified. In a modified form the bill was approved by the President on October 1, 1888. Railway labor organizations favored arbitration at this time, the Knights of Labor preferring compulsory arbitration. The carriers, however, wanted no interference on the part of the Government.

The law as finally enacted provided for voluntary arbitration and for compulsory investigation. The arbitration provisions of the law were never utilized during the 10 years the law remained on the statute books. The provision for investigation was used once, on the occasion of the Pullman strike in 1894. The Pullman strike and Federal action taken thereon are discussed in detail.

After the strike, discussion immediately began for the revision of the law of 1888. Compulsory arbitration was seriously considered, but the Erdman Act, finally passed in 1898, did not embody this feature. In the new act voluntary arbitration was authorized, but the provision for investigation was omitted and a new feature embodying provisions for mediation and conciliation was incorporated.

The year following its enactment the railway labor organizations requested mediation under the provisions of the act, but the railroads refused to enter such proceedings. It was not until about 8½ years after its passage that the provisions of the law were successfully utilized.

Sixty-one cases were settled under the act; 26 through mediation, 10 by mediation and arbitration, and 6 by arbitration alone. The remaining 19 were settled by the parties in dispute, but after the aid of the mediators had been invoked.

The third act, known as the Newlands law, was passed in 1913. It was an amendment and an amplification of the Erdman law, the principal change embodying an increase in the number of arbitrators and the creation of a permanent commission known as the Board of Mediation and Conciliation, authorized to take the initiative in settling controversies.

From the time of the passage of this act until December 1, 1919, 148 cases were settled under its provisions. Operations under the law were greatly curtailed when the railroads came under Federal control in 1918 because of the special war-time provisions for the regulation of industrial relations during the war period. The relations of the Railroad Administration with labor during this period of Federal control are discussed in detail in the report.

The transportation act, passed in 1920 to control industrial relations on the railroads after their return to private ownership, makes no direct provision for mediation, although both parties are to exercise every reasonable effort and "adopt every available means" to adjust any dispute which may interrupt commerce. The provisions for arbitration, establishing the Railroad Labor Board, are elaborate.

Prior to the period of Federal control the emphasis in all these laws had been placed upon the voluntary nature of the negotiations. Although the public was represented on the investigation commissions to be created by the law of 1888 and on the boards of arbitration to be established by that act and the Erdman and Newlands acts, as well as on the mediation boards of the latter two acts, in all these cases, Mr. Fisher says, "the public representation was more in the nature of that of an impartial judge rather than that of an interested

troversy. There was a growing tendency on the part of employ-

party." This public interest became the paramount one in the passage of the Adamson law, also discussed in the bulletin, and in the machinery set up by the Director General of Railroads during the era of Federal control. "The law of 1920 marks the final stage in the establishment of the primacy of public interest."

"It should be borne in mind," says Mr. Fisher, "that the situation dealt with is not one affecting labor in general, but only a special kind of labor in a particular field. It is readily conceded that it would not be desirable, or even possible, to apply to all classes of labor the plan which would best meet the ends of justice and of expediency in the field of railway labor. No attempt is made here to present or to defend a solution for all the ills of society that may come as a result of the maladjustment of the factions of capital and labor. Railway labor, and railway labor alone, is the problem under examination. Nor is it proposed to suggest that any device, however well planned and however well administered, will usher in a Utopian railway labor commonwealth. It is believed, though, that some plans give promise of better results than do others. Doubtless there are objections to any method mentioned. But this holds true with reference to almost any proposed remedy for any condition that needs remedying. All that is attempted here is an examination of the several solutions that have been proposed, a study of the causes leading to each proposal, and the reactions thereto of the classes of people affected, i. e., an examination in the light of the experience in the United States.

"Incidentally, the critical examination of the methods of Government intervention will serve the purpose of bringing out the strong points that can be urged in favor of the solution attempted in the transportation act of 1920."

Appendix A of the volume is devoted to an examination of some of the constitutional issues involved in Government action for the prevention and settlement of railway labor disputes.

Copies of the acts of 1888, 1898, 1913, 1916, and 1920 comprise Appendix B.

Work of the National War Labor Board.

BULLETIN 287 of the Bureau of Labor Statistics, recently issued, comprises a history of the formation and activities of the National War Labor Board.

For 16 months the National War Labor Board served as an industrial supreme court, adjusting controversies in those industries necessary for the effective conduct of the war. With the powers of the production departments of the Government, as well as the influence of the President, used in support of its awards, the board played an effective part in the stabilization of industrial relationships for the period of the war.

The awards and findings of the board directly affected more than 1,100 establishments, employing approximately 711,500 persons, but the influence of its decisions was much wider than these figures indicate. In numerous instances the board's decision was applied in practice to employees other than those directly involved in the con-

troversy. There was a growing tendency on the part of employers voluntarily to adjust hours and working conditions in conformity with the board's decisions.

The board issued no final report upon its dissolution in August, 1919. Its latest report covered the 12 months ending May 31, 1919. The purpose of the bureau's bulletin is to make available in convenient form a completed record of the board's history and performance. One chapter of the report covers the formation of the board, its raison d'être, its organization, and procedure. A second chapter is devoted to a résumé of the work of the board—its extent, the origin and disposition of its cases, the nature of the complaints brought to it for adjudication, and the character, enforcement, and administration of its awards. The documents of historical importance relating to the formation and activities of the board are reprinted in the third section of the bulletin. Here appear the principles and policies governing relations between workers and employers in war industries, the shop committee plan of the board, and other documents of significance in the record of the board.

No attempt has been made to analyze the awards of the board. Instead, a careful and thorough analysis of its decisions from its creation until May 31, 1919, made by a member of the board staff, is reprinted in the bulletin. A list of the decisions made after that date, in which no new principle is involved, is appended.

One hundred and six representative awards of the board are reprinted in the report. These awards serve to illustrate the board's interpretation and application of the principles outlined for its guidance by the War Labor Conference Board. The board's action on each of the important issues which confronted it is illustrated by at least one award.

Conciliation and Arbitration in Denmark.

THE work of the Danish Permanent Arbitration Court[1] has grown to such an extent during the last few years that in 1921 the law enacted in 1910 establishing the court was amended to meet present requirements. The conciliators, appointed for three years, are to be increased from one to three. The work and authority of the court will be apportioned equally among them, and provision is also made for joint conciliation by all three in case of extensive negotiations.

The most important amendment to the law is "the replacement of the clause prohibiting the publication of the conciliator's proposals without the consent of both parties by one which states that the proposals may not be published without the consent of the conciliator until the answers of both parties to the proposals have been received. A further new provision empowers the conciliators to require any employers' or workers' organization to produce a copy of any collective agreement they may have concluded, while another provides that only the exact text of any conciliation proposal may be laid before any organization of employers or workers, and that the voting

[1] Labour Gazette, London, March, 1922, p. 111. Based on Social Forsorg, December, 1921.

must take the form of a direct refusal or a direct acceptance of the proposal."

The jurisdiction of this court extends to industry, handicrafts, agriculture, transport, and (since 1919) to commerce and general office work. It enforces and interprets existing collective agreements. From the time of the passing of the original act in 1910 to 1920, 363 cases have been dealt with, about 50 per cent of which came up during the last 3½ years. Of these cases 70 per cent were heard and settled; 20 per cent were disposed of in the preliminary proceedings, and 10 per cent were withdrawn.

COOPERATION.

Farmers' Cooperative Movement in Alberta.

THE farmers' cooperative movement in Alberta, according to a consular report of February 7, 1922, was an outgrowth of the American Society of Equity. The Alberta movement, which was started in January, 1909, now numbers, in the United Farmers of Alberta, 37,900 in that Province alone. The work of the organized farmers is along two lines: Economic, social, and educational; and commercial. The central educational body in Alberta is the United Farmers of Alberta in which the local bodies are represented by delegates, the basis of representation being 1 delegate for every 10 paid-up members or major portion of 10. These delegates elect the officers and directors of the central association. From the United Farmers of Alberta there has grown another organization, known as the United Farm Women of Alberta, and this organization is doing, among the farmers' wives and daughters the same kind of work that the United Farmers of Alberta is carrying on among the farmers. The basis of representation and the method of government is the same in the United Farm Women of Alberta as in the United Farmers of Alberta.

The objects for which the United Farmers of Alberta is incorporated are as follows:

1. The fostering and encouragement of cooperative effort to the end:
(*a*) That the moral, intellectual, and financial status of the farmer may be improved thereby.
(*b*) That the rural home may receive more of the necessities, comforts, and convenience of modern times, and rural life be enriched and improved thereby.
(*c*) That the business of agriculture may receive the proper recognition that its importance justifies in provincial and national affairs.
(*d*) That the Dominion may perform to the best advantage the functions in the Empire which in the economy of nature it is best fitted to perform.
2. To further the intersts of farmers and ranchers in all branches of agriculture; to promote the best methods of farming business; to seek to enlarge and increase markets; to gather market information; to obtain by united efforts profitable and equitable prices for farm produce, and to secure the best and cheapest transportation.
3. To watch, influence, and promote legislation relative to the objects specified in the preceding subsections (1) and (2) and to any other matter affecting the farmers' business, and to take any legitimate action necessary for this purpose.
4. To promote social intercourse, a higher standard of community life, and the study of economic and social questions bearing on our interests as farmers and citizens.
5. To settle disputes between members without recourse to law whenever possible.
6. To take into consideration any members' case of grievance, hardship or litigation and to defend our membership as far as it may be possible and just.

Similar educational bodies have been established in Saskatchewan, Manitoba, and Ontario. These are called, respectively, The Saskatchewan Grain Growers' Association, The Manitoba Grain Growers' Association, and The United Farmers of Ontario.

The commercial bodies of the movement are the Alberta Farmers' Cooperative Elevator Co. (Ltd.), the Saskatchewan Cooperative Elevator Co. (Ltd.), the United Grain Growers (Ltd.), and the United Farmers' Cooperative Society of Ontario (Ltd.).

In 1913 the Alberta Farmers' Cooperative Elevator Co. (Ltd.) was established. The method adopted in the organizing of the company, as provided for in the authorizing act, was that when farmers owning or cultivating an annual grain crop acreage of at least 6,000 acres tributary to any shipping point prior to the 1st day of April in any year in writing requested the directors to establish an elevator at that shipping point the elevator was to be established by the company in time to receive that year's grain and other farm produce.

Provision was further made for provincial aid, the Government being authorized under the act to loan to the company for the purpose of aiding in the acquisition, erection, extension, or remodeling of any elevator or elevators a sum not to exceed 85 per cent of the estimated cost of the said elevator or elevators or of such extension or remodeling. From 1913 to 1918 the Government thus advanced approximately $1,200,000.

This company finally merged with the Grain Growers Co. to form the United Grain Growers (Ltd.). The United Grain Growers (Ltd.) has been very helpful in assisting the farmers in the marketing of the crop. The last report of the United Grain Growers (Ltd.) showed that the number of shareholders is 37,500 and the number of shares subscribed 128,216. The capital subscribed is $3,205,400, and the paid-up capital $2,765,685.

According to the last report, 390,416,554 bushels of grain have been handled by the farmers' company since organization.

In order to afford convenient markets for the farmer the company owns 223 elevators and has under lease 124 elevators, making a total of 347 elevators operated for the benefit of the members of the farmer organizations. In addition to the elevators, the company owns 237 warehouses and 192 coal sheds. The company also operates, under lease at Fort William, a terminal elevator having a capacity of 2,500,000 bushels, and a private terminal elevator at Port Arthur with a capacity of 600,000 bushels, with sufficient water frontage and site so that at a future date, if necessary, the company will be able to build its own public terminal at the head of the Great Lakes.

Since Alberta is a mixed-farming Province, it has been necessary to undertake other lines of business, as well as grain, and a department was opened up in April, 1914, for handling live stock. From that time till August 31, 1921, the association handled 23,733 cars of cattle, sheep, and hogs.

In 1914 a cooperative supply department was opened, the first supplies handled being flour and feed. Later other commodities, such as lumber, fence posts, wire, fruit, etc., which could be handled in carload lots, were also taken up, and in 1915 the company began to handle coal by arranging for distribution through the local elevator agents.

For the three years ending August 31, 1920, the sales of this department were as follows:

Year ending Aug. 31:	Amount of sales.
1918	$5,925,791
1919	6,180,359
1920	6,908,896
Total	19,015,046

The commercial cooperative bodies in Saskatchewan and Ontario work along the same lines as the above.

Weavers' Cooperative Societies in the Punjab, India.[1]

WITH the present attempt at the boycott of foreign cloth and the probable revival of the old hand-loom industry, it looks as if the village weaver is likely, at any rate for a time, to come into his own again, provided that he is able to defend himself against the forces which in his own country have worked and still are working constantly against him, and which exact from him a heavy toll at every stage from the purchase of the raw material up to the marketing of the finished goods.

In order to understand the operation of these forces, and the manner in which they effectively throttle the industry, one has to consider the ordinary workaday life of the hand-loom weaver. He works either in the factory of a small capitalist, or as an independent artisan in his own home. From the point of view of the weaver himself, there is little to be said in favor of the small capitalistic factory. With no organization at his back and no bargaining power, he seldom receives more than a bare living wage, tends to lose all feelings of honorable pride in his craft, and is likely to have little incentive toward self development or improvement of his economic conditions. He becomes a mere wage earner, working without any enthusiasm or imagination. On the other hand, as an independent artisan he has little or no credit behind him, and again finds himself in the hands of the capitalist. In the first place, he has to buy his raw material on credit from the latter—in other words, he makes his purchases in the dearest market. When it comes to disposing of his finished goods he has to sell them in the cheapest market to his creditor, at a price fixed by the latter. A heavy toll is levied on each occasion, and he finds it difficult to eke out even a bare livelihood. Again, the village weaver is, as a rule, uneducated. He has no means of informing himself as to the conditions of the trade, the fluctuations of the yarn market, the changing fashions, and the latest improvements in the implements of his craft. Marketing is an art the intricacies of which he knows and suspects nothing. He has no incentive to work hard or to take any trouble, and he struggles along, perplexed and helpless, the serf of the capitalist, till finally, abandoning his hereditary craft, he is either forced onto the soil, or goes to swell the ranks of the proletariat in the city or town.

It may be doubtful whether the hand-loom weaver, plying his trade in his little hut, can ever hope to hold his own against the small entrepreneur, or the large-scale factory owner with his up-to-date labor-saving machinery; but the effort seems well worth while. What is certain is that it is only by cooperation that the effort is likely to be successful. The basis of cooperation is a common need. If many people want the same thing, they are more likely to attain it by working together and helping one another.

What the weaver wants, in the first instance, is cheap credit, and good credit, and like other poor men he can obtain it only by cooperation. By means of cooperative credit, relieved of the incubus of the capitalist, he will be free to buy his raw material in the cheapest market, and to dispose of his finished goods in the dearest. In the

[1] Extract from an article of the same name printed in the December, 1921, issue of the Bombay Cooperative Quarterly.

next place, he wants education, and here too cooperation will assist him, both directly and indirectly, as it has done in other countries. By taking his part in the deliberations and decisions of his society his wits will be sharpened. He will learn something about standardization, buying and selling, and the fixation of prices. He will become less conservative, and more receptive to new ideas and methods. His public spirit will be awakened, and he will begin to believe that his future rests in his own hands more than he had imagined; that he can hope by combining with his fellows to work out his economic freedom. He will begin to ask for elementary education, and some technical training, for himself and for his children. He will be curious to learn something about newer methods and labor-saving appliances. If the market for his Khaddar or Dasuti or Ghalum is not favorable, he will think of producing more refined and readily marketable goods.

In the Punjab some of the village weavers, mostly of the Jullundur and Hoshiarpur districts, made a start on these lines some six or seven years ago and have already made considerable progress. They have formed some 57 societies, which are guided and controlled by three unions. There is also a central institution called the Weavers' Central Cooperative Stores Limited, which is located in Amritsar. Naturally, the societies have encountered a lot of opposition from the capitalists, while latterly in some cases even the village proprietors have resented their success. Being ignorant and inexperienced, too, they have not always been fortunate in their yarn dealings. While they are only beginning painfully to learn the rudiments of good marketing, still they are learning and progressing.

Their capital is partly contributed by the members themselves in the form of small shares, while all the profits are placed to reserve. The share capital now amounts to some 11,000 rupees ($5,353, par) and the undistributed profits exceed 15,000 rupees ($7,299, par). Local deposits too are sometimes secured from members or from well-wishers; but the bulk of the working capital is still borrowed from the Central Stores. Share capital, however, is being steadily built up, and in some of the societies members have decided to continue annual share contributions for a period of 10 years; in others a system of compulsory deposits is being introduced. Advances by the stores to the societies are almost always in kind, though occasionally for good reasons cash advances are given for the purpose of local purchases. The Stores has a working capital of about Rs. 1¼ lakhs ($60,825, par), most of which is on loan from central cooperative banks, the directors of which have always shown the greatest sympathy with the movement to uplift the weavers. The Government, too, has advanced a loan at a moderate rate of interest, while the balance of about 16,000 rupees ($7,786, par) is made up by share contributions and deposits from the societies and by the reserve to which all the profits are placed.

IMMIGRATION.

Statistics of Immigration for February, 1922.

By W. W. HUSBAND, COMMISSIONER-GENERAL OF IMMIGRATION.

THE following tables show the total number of immigrant aliens admitted into the United States and emigrant aliens departed from the United States in January and February, 1922, and for the six months' period from July to December, 1921. The tabulations are presented according to the countries of last permanent or future permanent residence, races or peoples, occupations, and States of future permanent or last permanent residence. The last table (Table 6) shows the number of aliens admitted under the percentum limit act of May 19, 1921, up to April 12, 1922.

TABLE 1.—INWARD AND OUTWARD PASSENGER MOVEMENT IN JANUARY AND FEBRUARY, 1922, AND DURING THE SIX MONTHS ENDING DECEMBER 31, 1921.

Period.	Arrivals.					Departures.			
	Immigrant aliens admitted.	Non-immigrant aliens admitted.	United States citizens arrived.	Aliens debarred.	Total.	Emigrant aliens departed.	Non-emigrant aliens departed.	United States citizens departed.	Total.
July to December, 1921	200,121	65,287	133,111	6,678	405,197	137,878	86,749	162,735	387,362
January, 1922	15,928	6,705	12,057	892	35,582	7,708	7,877	15,519	31,104
February, 1922	10,792	6,851	17,573	991	36,207	7,053	7,360	19,061	33,484

TABLE 2.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED, AND FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED, JANUARY AND FEBRUARY, 1922, AND SIX MONTHS ENDING DECEMBER 31, 1921, BY COUNTRIES.

Country.	Immigrant.			Emigrant.		
	July 1 to Dec. 31, 1921.	January, 1922.	February, 1922.	July 1 to Dec. 31, 1921.	January, 1922.	February, 1922.
Austria	2,754	217	158	368	9	17
Hungary	5,535	89	49	3,011	119	225
Belgium	1,306	115	38	705	84	29
Bulgaria	267	17	10	544	29	25
Czechoslovakia, Republic of	10,728	1,297	180	5,238	199	277
Denmark	1,594	78	70	444	27	23
Finland	1,595	101	99	879	25	26
France, including Corsica	3,155	174	116	1,314	118	75
Germany	9,752	1,216	710	2,582	135	191
Greece	3,329	46	9	4,805	345	517
Italy, including Sicily and Sardinia	36,829	1,942	410	38,702	2,212	1,457
Netherlands	1,196	54	50	522	31	47
Norway	2,465	97	183	876	55	25
Poland, Republic of	26,225	606	277	26,114	545	736
Portugal, including Cape Verde and Azores Islands	1,699	23	4	4,694	147	87

TABLE 3.—IMMIGRANT ALIENS ADMITTED AND EMIGRANT ALIENS DEPARTED

TABLE 2.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED, AND FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED, JANUARY AND FEBRUARY, 1922, AND SIX MONTHS ENDING DECEMBER 31, 1921, BY COUNTRIES—Continued.

Country.	Immigrant.			Emigrant.		
	July 1 to Dec. 31, 1921.	January, 1922.	February, 1922.	July 1 to Dec. 31, 1921.	January, 1922.	February, 1922.
Rumania	5,758	1,395	408	2,751	107	206
Russia	7,004	1,509	996	4,387	109	169
Spain, including Canary and Balearic Islands	480	32	20	4,788	630	273
Sweden	3,699	228	99	1,117	27	348
Switzerland	2,042	106	191	571	34	68
Turkey in Europe	1,382	51	8	123	30	27
United Kingdom:						17
England	9,500	383	616	3,599	287	
Ireland	6,117	142	175	1,109	68	342
Scotland	4,970	330	81	535	46	136
Wales	553	33	47	41	2	43
Yugoslavia	5,913	74	18	7,782	171	1
Other European countries	246	24	31	512	52	30
Total, Europe	156,092	10,439	5,053	118,113	5,643	5,417
China	2,182	422	261	3,913	474	305
Japan	3,089	250	635	2,584	300	247
India	217	30	24	196	27	7
Turkey in Asia	1,820	67	25	1,298	19	53
Other countries of Asia	626	28	39	46	4	8
Total, Asia	7,934	797	984	8,037	824	620
Africa	429	19	13	75	7	16
Australia, Tasmania, and New Zealand	599	55	43	328	71	50
Pacific Islands, not specified	39	.....	4	24	3	1
British North America	21,979	3,001	2,803	2,410	199	197
Central America	527	26	24	545	63	68
Mexico	6,737	1,233	1,509	4,479	424	308
South America	1,508	133	136	1,036	135	105
West Indies	4,257	233	212	2,806	336	281
Other countries	20	2	1	25	3	.....
Grand total	200,121	15,928	10,792	137,878	7,708	7,063
Males	93,260	8,226	5,661	100,663	6,282	5,454
Females	106,861	7,702	5,131	37,215	1,426	1,609

TABLE 3.—IMMIGRANT ALIENS ADMITTED AND EMIGRANT ALIENS DEPARTED DURING JANUARY AND FEBRUARY, 1922, AND SIX MONTHS ENDING DECEMBER 31, 1921, BY RACES OR PEOPLES.

Race or people.	Immigrant.			Emigrant.		
	July 1 to Dec. 31, 1921.	January, 1922.	February, 1922.	July 1 to Dec. 31, 1921.	January, 1922.	February, 1922.
African (black)	3,109	137	147	1,069	88	104
Armenian	2,039	73	22	154	15	14
Bohemian and Moravian (Czech)	2,625	233	84	2,929	133	141
Bulgarian, Serbian, and Montenegrin	1,265	42	13	4,600	111	190
Chinese	2,041	602	369	3,823	455	301
Croatian and Slovenian	3,542	121	12	3,484	80	69
Cuban	500	22	14	479	66	48
Dalmatian, Bosnian, and Herzegovinian	230	14	7	372	6	15
Dutch and Flemish	2,437	177	139	1,384	115	83
East Indian	138	23	19	157	22	7
English	16,431	1,469	1,491	5,375	474	500
Finnish	1,487	92	103	572	26	26
French	7,015	778	743	1,757	176	113
German	18,256	1,909	1,244	3,347	192	259
Greek	3,585	70	27	4,905	336	535
Hebrew	36,852	3,056	1,781	390	68	58
Irish	9,402	498	462	1,299	96	166
Italian (north)	5,158	506	83	4,728	416	221

TABLE 3.—IMMIGRANT ALIENS ADMITTED AND EMIGRANT ALIENS DEPARTED DURING JANUARY AND FEBRUARY, 1922, AND SIX MONTHS ENDING DECEMBER 31, 1921, BY RACES OR PEOPLES—Concluded.

Race or people.	Immigrant.			Emigrant.		
	July 1 to Dec. 31, 1921.	January, 1922.	February, 1922.	July 1 to Dec. 31, 1921.	January, 1922.	February, 1922.
Italian (south)	31,854	1,498	424	34,214	1,826	1,261
Japanese	2,858	234	631	2,569	298	247
Korean	35	1	13	27	1	4
Lithuanian	779	115	79	3,409	71	87
Magyar	5,546	260	60	3,240	137	256
Mexican	6,227	912	1,332	4,170	406	276
Pacific Islander	4	.....	2	3	.....	.....
Polish	5,672	174	117	24,020	472	674
Portuguese	1,612	26	5	4,760	160	93
Rumanian	1,068	289	39	3,357	89	175
Russian	1,191	221	124	1,874	75	136
Ruthenian (Russniak)	578	22	7	353	9	10
Scandinavian (Norwegians, Danes, and Swedes)	8,792	536	461	2,620	135	133
Scotch	8,065	694	508	923	94	89
Slovak	4,946	830	83	2,146	52	113
Spanish	1,134	76	68	5,365	700	413
Spanish American	820	42	65	1,027	121	105
Syrian	1,044	50	46	1,079	35	22
Turkish	32	2	.....	169	3	26
Welsh	575	41	53	96	6	4
West Indian	588	44	25	498	64	46
Other peoples	588	30	10	835	79	44
Total	200,121	15,928	10,792	137,878	7,708	7,063
Males	93,260	8,226	5,661	100,663	6,282	5,454
Females	106,861	7,702	5,131	37,215	1,426	1,609

TABLE 4.—IMMIGRANT ALIENS ADMITTED AND EMIGRANT ALIENS DEPARTED DURING JANUARY AND FEBRUARY, 1922, AND SIX MONTHS ENDING DECEMBER 31, 1921, BY OCCUPATIONS.

Occupation.	Immigrant.			Emigrant.		
	July 1 to Dec. 31, 1921.	January, 1922.	February, 1922.	July 1 to Dec. 31, 1921.	January, 1922.	February, 1922.
Professional:						
Actors	392	57	33	69	7	9
Architects	65	11	10	35	2	4
Clergy	764	58	37	330	41	14
Editors	51	3	5	14	.....	3
Electricians	356	30	28	80	6	12
Engineers (professional)	609	49	54	228	22	26
Lawyers	81	7	4	37	3	1
Literary and scientific persons	244	14	15	88	12	8
Musicians	407	105	23	141	9	7
Officials (Government)	467	62	48	147	23	5
Physicians	273	42	21	88	8	7
Sculptors	107	10	7	71	5	3
Teachers	1,413	69	68	274	23	19
Other professional	1,408	128	120	346	23	42
Total	6,637	645	473	1,948	184	160
Skilled:						
Bakers	916	96	72	332	23	24
Barbers and hairdressers	884	55	33	234	20	18
Blacksmiths	553	47	33	207	9	8
Bookbinders	63	5	2	9	1	1
Brewers	24	2	2	12	.....	1
Butchers	647	73	34	232	8	10
Cabinetmakers	102	10	3	102	6	7
Carpenters and joiners	2,108	172	113	781	45	54
Cigarette makers	26	1	.....	5	.....	.....
Cigar makers	99	5	6	66	10	16

TABLE 5.—FUTURE PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED, AND LAST PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED, JANUARY AND FEBRUARY, 1922, AND SIX MONTHS ENDING DECEMBER 31, 1921, BY STATES AND TERRITORIES.

TABLE 4.—IMMIGRANT ALIENS ADMITTED AND EMIGRANT ALIENS DEPARTED DURING JANUARY AND FEBRUARY, 1922, AND SIX MONTHS ENDING DECEMBER 31, 1921, BY OCCUPATIONS—Concluded.

Occupation.	Immigrant.			Emigrant.		
	July 1 to Dec. 31, 1921.	January, 1922.	February, 1922.	July 1 to Dec. 31, 1921.	January, 1922.	February, 1922.
Skilled—Concluded.						
Cigar packers	1	2	1	5	.....	1
Clerks and accountants	5,471	523	369	1,197	103	108
Dressmakers	2,628	151	88	236	14	7
Engineers (locomotive, marine, and stationary)	548	37	42	138	26	2
Furriers and fur workers	85	6	8	21	3	2
Gardeners	236	26	18	132	10	12
Hat and cap makers	103	9	2	9	2	1
Iron and steel workers	369	47	27	132	11	8
Jewelers	89	7	5	44	7	3
Locksmiths	344	33	26	21	3	1
Machinists	669	80	61	685	23	36
Mariners	1,668	119	179	787	121	85
Masons	972	55	38	242	20	23
Mechanics (not specified)	1,104	97	63	474	30	24
Metal workers (other than iron, steel and tin)	120	9	3	42	2	.....
Millers	129	4	2	30	1	5
Milliners	396	25	23	26	2	2
Miners	1,394	138	79	1,639	116	148
Painters and glaziers	485	45	36	240	18	22
Pattern makers	27	2	2	8	.....	.....
Photographers	118	12	4	36	3	2
Plasterers	66	8	11	29	3	.....
Plumbers	132	11	11	37	6	2
Printers	242	20	14	52	3	6
Saddlers and harness makers	52	8	6	16	1	.....
Seamstresses	1,351	75	56	74	6	8
Shoemakers	1,888	90	42	540	28	30
Stokers	205	27	9	135	8	6
Stonecutters	108	5	5	61	5	4
Tailors	3,240	195	123	596	51	34
Tanners and curriers	78	3	.....	22	2	.....
Textile workers (not specified)	92	7	4	60	1	.....
Tinners	127	9	5	25	1	2
Tobacco workers	12	2	.....	.....	.....	.....
Upholsterers	46	4	1	15	.....	2
Watch and clock makers	201	9	9	20	2	3
Weavers and spinners	785	58	39	340	7	13
Wheelwrights	5	1	1	8	.....	.....
Woodworkers (not specified)	53	1	2	21	1	1
Other skilled	1,428	109	87	765	63	37
Total	32,489	2,535	1,799	10,940	825	780
Miscellaneous:						
Agents	330	23	33	119	12	11
Bankers	84	7	6	66	16	2
Draymen, hackmen, and teamsters	216	11	14	47	7	6
Farm laborers	6,255	547	416	1,752	117	107
Farmers	4,634	450	312	3,648	179	155
Fishermen	263	37	24	93	4	6
Hotel keepers	109	4	4	66	5	5
Laborers	20,248	1,713	1,156	73,673	4,225	3,594
Manufacturers	144	4	11	114	8	7
Merchants and dealers	4,469	490	305	2,592	281	203
Servants	31,305	1,854	954	3,005	170	174
Other miscellaneous	6,451	654	556	2,537	211	227
Total	74,508	5,794	3,791	87,712	5,235	4,497
No occupation (including women and children)	86,487	6,954	4,729	37,278	1,464	1,626
Grand total	200,121	15,928	10,792	137,878	7,708	7,063

TABLE 5.—FUTURE PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED, AND LAST PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED, JANUARY AND FEBRUARY, 1922, AND SIX MONTHS ENDING DECEMBER 31, 1921, BY STATES AND TERRITORIES.

State or Territory.	Immigrant.			Emigrant.		
	July 1 to Dec. 31, 1921.	January, 1922.	February, 1922.	July 1 to Dec. 31, 1921.	January, 1922.	February, 1922.
Alabama	321	10	20	91	2	9
Alaska	73	4	11	67	3	9
Arizona	813	66	146	841	49	26
Arkansas	118	8	13	32	7	1
California	13,794	1,450	1,076	9,164	758	504
Colorado	750	59	49	343	35	33
Connecticut	4,169	263	121	4,357	219	145
Delaware	262	22	21	274	12	4
District of Columbia	1,001	60	66	249	16	19
Florida	1,559	144	112	775	75	57
Georgia	269	28	4	94	8	.....
Hawaii	1,110	7	468	563	.....	252
Idaho	286	33	32	128	16	5
Illinois	15,434	1,223	618	10,332	401	463
Indiana	1,820	132	80	1,396	40	53
Iowa	1,317	79	73	455	29	25
Kansas	634	64	33	175	31	25
Kentucky	241	20	14	67	6	3
Louisiana	656	58	63	491	63	40
Maine	1,916	237	282	279	13	8
Maryland	1,188	100	44	748	22	26
Massachusetts	13,421	987	605	12,079	401	272
Michigan	7,270	581	500	5,468	316	186
Minnesota	3,072	251	200	1,439	62	55
Mississippi	164	18	8	43	12	6
Missouri	1,987	153	88	845	48	42
Montana	554	46	42	292	21	15
Nebraska	880	81	40	323	31	30
Nevada	115	18	8	156	10	2
New Hampshire	953	97	97	256	13	15
New Jersey	10,691	856	356	7,382	247	246
New Mexico	199	31	40	117	30	29
New York	63,911	4,457	2,463	42,436	3,036	2,864
North Carolina	156	6	5	47	11	.....
North Dakota	582	38	37	171	12	8
Ohio	8,769	624	234	7,875	208	267
Oklahoma	332	31	25	96	11	11
Oregon	1,141	169	95	616	31	26
Pennsylvania	20,169	1,477	699	18,627	671	829
Philippine Islands	5	1	.....	.....	.....	.....
Porto Rico	181	39	13	200	20	9
Rhode Island	2,047	165	99	1,229	32	32
South Carolina	116	12	5	28	8	2
South Dakota	359	24	17	102	14	10
Tennessee	267	15	14	62	4	7
Texas	5,068	895	1,050	1,761	226	145
Utah	557	29	39	210	40	9
Vermont	896	80	82	102	4	6
Virginia	917	31	71	173	9	9
Virgin Islands	9	.....	.....	6	.....	2
Washington	3,143	331	334	1,764	158	91
West Virginia	1,237	74	29	1,224	66	63
Wisconsin	2,866	208	133	1,732	38	51
Wyoming	356	36	18	96	23	17
Total	200,121	15,928	10,792	137,878	7,708	7,063

those who, physically and mentally, would make valuable additions to our population would be permitted to board ship for America.

There should be rigid tests of mental qualifications by American consuls. One

TABLE 6.—STATUS ON APRIL 12, 1922, OF THE IMMIGRATION OF ALIENS INTO THE UNITED STATES, UNDER THE PERCENTUM LIMIT ACT OF MAY 19, 1921.

Country or place of birth.	Total admitted July 1, 1921, to Apr. 12, 1922.[1]	Total admissible, fiscal year 1921-22.	Number admissible during remainder of year.
Albania	276	287	11
Austria	3,443	7,444	4,001
Belgium	1,570	1,557	(2)
Bulgaria	301	301	.....
Czechoslovakia	13,983	14,269	286
Danzig	59	285	226
Denmark	2,357	5,644	3,287
Finland	2,280	3,890	1,610
Fiume	18	71	53
France	3,736	5,692	1,956
Germany	14,286	68,039	53,753
Greece	3,440	3,286	(2)
Hungary	6,018	5,635	(2)
Italy	42,048	42,021	(2)
Luxemburg	91	92	1
Netherlands	1,888	3,602	1,714
Norway	3,940	12,116	8,176
Poland (including Eastern Galicia)	26,072	25,800	(2)
Portugal (including Azores and Madeira Islands	2,352	2,269	(2)
Rumania	7,396	7,414	18
Russia (including Siberia)	19,847	34,247	14,400
Spain	762	663	(2)
Sweden	6,719	19,956	13,237
Switzerland	2,981	3,745	764
United Kingdom	31,173	77,206	46,033
Yugoslavia	6,638	6,405	(2)
Other Europe (including Andorra, Gibraltar, Liechtenstein, Malta, Memel, Monaco, San Marino, and Iceland)	141	86	(2)
Armenia	1,553	1,588	35
Palestine	208	56	(2)
Syria	999	905	(2)
Turkey (Europe and Asia, including Smyrna District)	1,085	653	(2)
Other Asia (including Persia, Rhodes, Cyprus, and territory other than Siberia, which is not included in the Asiatic Barred Zone. Persons born in Siberia are included in the Russia quota)	525	78	(2)
Africa	185	120	(2)
Australia	278	271	(2)
New Zealand	75	50	(2)
Atlantic islands (other than Azores, Madeira, and islands adjacent to American continents)	81	60	(2)
Pacific islands (other than New Zealand and islands adjacent to the American continents)	11	22	11
Total	[3]208,815	355,825	149,572

[1] Including aliens who were admitted in excess of quota of certain nationalities for the month of June, 1921, and charged against the quota for the fiscal year 1921-22, as provided in House Joint Resolution No. 153.

[2] Admissions in excess of the quota for the year appearing in this table represent temporary admissions made in cases involving unusual hardships.

[3] Not deducting excess of 2,562 over quota, admitted from countries indicated.

Report on European Emigration Conditions as Affecting the United States.

AMONG the observations and recommendations made by Lillian Russell Moore in her report, under date of March 28, 1922, to the Secretary of Labor on European emigration conditions as affecting the United States are the following:

In this immigration problem, then, there is only one thing that demands serious attention, and that is: *What is best for America?*

I believe it would be a good thing for America if an immigration "holiday" of five years could be declared. But if we must keep our gates open I would urge a new system, by which the sifting process should be carried on abroad, so that none but

they succeed in reaching New York, disembark as members of the crew. It is, there-

those who, physically and mentally, would make valuable additions to our population would be permitted to board ship for America.

There should be rigid tests of mental qualifications by American consuls. One rigid requirement should be that applicants must be able to read, write, and speak their own language.

Physical tests should be conducted by American physicians, and any bodily weakness should mean rejectment. The Wasserman blood test ought to be employed in every case.

I am insistent upon the employment of American physicians to make these tests, because I believe that racial sympathies might lead to too liberal a view of bodily infirmities. It is just possible, too, that some foreign Government agencies might not object too severely to the departure of undesirables.

If the present law restricting immigration by quotas from other countries is continued, it should be materially strengthened, as I have suggested. There should be also a central headquarters, possibly in London, where American consuls should regularly report the number of their visés, so that the quota could not be exceeded any month, thus avoiding the hardship of deportation for the excess immigrants.

In present circumstances, every intending immigrant needs simply to apply at the nearest American consulate for a visé, for which he pays $10. It is the consul's duty to ascertain all the facts in relation to the individual, including details respecting health, morals, contract labor and the like—but the consul is absolutely limited as present conditions exist. He has no power to refuse a visé for any reason other than that the quota of the country is exhausted—and in which event alone he may refuse a visé. This is unfortunate, for it necessarily leads to thousands of departures of unfit persons to America—who succeed either by influence or trickery in entering the country and being turned back upon inspection at Ellis Island.

Consuls should be authorized to refuse visés to all unfit persons. All applicants for visés in the case of immigrant persons should be required to submit details three months before final action is taken. This should include a certificate from their native doctor stating that a blood test has been taken—thus proving they are physically fit. In the case of a male immigrant a penal certificate should be presented giving a record of his career, to which is attached a photograph of the man.

It would also be advisable to have the Bureau of Immigration and Naturalization subject every foreigner living in the United States who wishes to bring over an immigrant to the same examination as the immigrant himself must pass before a consular officer. Such a foreign resident should be required to submit a police record covering the entire time of his residence in the United States, and an affidavit of support executed by the relative in the United States should be demanded of every applicant. And after this affidavit has been executed, and before it is sent abroad, to the immigrant, it should be stamped by the immigration authorities, so that when it is presented to a consular officer, with a request for a visé, he will know that the immigrant intends to join a decent, law-abiding resident of the United States.

There should be additional laws making it a felony for any resident of the United States making a false statement concerning the admissibility of any relative or other immigrant. This law should be so drastic that it will seal up one of the most intolerable loopholes in our immigration system.

A change in the immigration law from the legal 3 per cent quota would, perhaps, be advisable to read instead, that the number of immigrants to be allowed in the United States should be agreed upon by the Secretary of Labor and foreign countries establishing the number of passports to be issued for three months in advance, and that the total quota of 3 per cent of all countries, added together, shall not be surpassed. This would give the Secretary of Labor the power to choose such countries as he thinks have the most desirable immigrants for the United States. And, instead of the steamship lines all depositing their immigrants at Ellis Island, license could be given for disembarkation of immigrants at such ports as New York, Boston, Baltimore, Savannah, New Orleans, Galveston, San Francisco, and Seattle. With our own merchant marine this could easily be done. This would scatter the immigration throughout the country, place the farmers in the farming countries and relieve New York from increasing its present foreign population.

This system would likewise put a stop to clandestine immigration. The newspapers in Italy publish, after the sailing of practically every steamer for the United States, that a number of clandestine immigrants have been found hidden on board and were arrested, and in almost every case they were criminals.

While I was in Rome the steamer *Arabic* sailed from Naples, and advice came from the Italian authorities by wireless that there were 100 clandestine immigrants on board. These men pay large sums of money to be smuggled on the steamer, and, if

The minister of health has called attention to the necessity of vaccinating everyone arriving from Russia, declaring that children especially are carriers of typhus.

We take in too few productive immigrants, and too many destructive.

they succeed in reaching New York, disembark as members of the crew. It is, therefore, advisable that each member of the crew of any steamer sailing for a United States port should have a proper book or certificate, with his photograph on it, for identification, and stating that he is one of the crew of the steamer, and should not be allowed to disembark and pass through the customs gate without showing such card or certificate.

In this manner these undesirables would be unable to land. At present many are taken from alongside in small boats and carried to some convenient landing place.

When I arrived in Cherbourg I was met by the doctor in charge of the immigrants. He gave me the inclosed certificate, which shows that he vaccinated 200 immigrants bound for America—out of which 21 proved to have fatal diseases which would compel them to be turned back upon their arrival at Ellis Island. Neither the examining doctor, the consul who viséed their passports, nor the consul general at Cherbourg was endowed with the power to forbid them to go aboard the steamer. * * * It takes but a small mind to realize that if more power is not invested in our consuls abroad, and if every immigrant is not compelled to have a blood test certificate at the very beginning of his intentions to come to America as an immigrant, our civilization of the future will deteriorate to a marvelous extent.

I further believe that all of the personal information of each man gathered by the consuls and immigration inspectors should be available to examining judges before certificates of naturalization are granted. We are menaced, and we must avoid that condition. Take the consul at Vienna, for instance:

During the years of 1920 and 1921, long before office hours, crowds of unwashed, ill-fed, prospective immigrants—most of them of very low mentality and moral fiber—surged around the consulate. These people were from Poland, Russia, or Rumania, and claimed to have blood relatives in America who would take care of them and guarantee them support. They did not know the meaning of the word truthfulness, and were carriers of disease caused by their extreme bodily filth. * * * It was found that underground channels of information existed among these people as how to have false documents prepared by meeting certain "agents" in given "café houses." Other means of pressure were brought to bear on consular officers. In these cases lawyers would appear as intermediaries or friends from the United States. Usually naturalized American citizens would appear as spokesmen. These often proved to be promoters of immigration, who would obtain in New York the names of persons wishing their so-called relatives to come over and who, for the consideration of usually more than a hundred dollars in each case, would fill out a large list of names and undertake to go to eastern Europe to "see them through" all visé and traveling formalities.

Of the several thousand Polish immigrants who obtained visés in Vienna in the years 1920–1921 it was the personal observation of a consular officer stationed there that only two were not bound for New York City, and just one claimed to be a farmer—all nonproductive so-called citizens.

We have laws and regulations of a most painstaking character which prevent the shipment of live stock, living plants and seeds to the United States, and we prohibit entirely shipments under these heads instantly when danger arises, but until the last few months we have opened our national gates to human beings desiring to settle among us without much restriction as to moral consideration or purity of blood. And as a result we have a huge problem with which to deal.

If Congressmen should go abroad they could see the facts as I saw them. One particular fact is that no good immigration is turning our way. The good inhabitants of every foreign country are needed there, and can possibly be happier and more contented there than in America.

Reconstruction is being elaborately carried on in France, and every able-bodied man is not only needed, but his prospects are made so alluring that he has no inclination to emigrate. * * * Italy needs men to till the soil, to grow food and to keep her own country prosperous. It is to the interest of France and Italy to keep the best of their sons at home—if not forever, at least for a long time to come.

There is more to this immigration problem than the economic side. Warning has been issued through the German Red Cross that the United States must be on its guard against the introduction of cholera and typhus by Russian immigrants. Hordes of these people, Dr. A. Schlesinger officially announced, are pouring into Germany over the Polish, Latvian, and Esthonian borders, and many are seeking passports to America, where they have relatives and friends who are financing them for the journey.

Already nearly 50,000 cases exist in Germany traced to refugees, and German immigrants from the Volga region have been infected. Seventy-five per cent of the recent arrivals in the concentration camps were diseased, according to Red Cross statistics.

The minister of health has called attention to the necessity of vaccinating everyone arriving from Russia, declaring that children especially are carriers of typhus.

We take in too few productive immigrants, and too many destructive.

The melting pot has been overcrowded. It has boiled too quickly and is running over.

It were better to put out the fires under it and allow its contents to solidify before adding any more raw material.

If we don't keep up the bars, and make them higher and stronger, there will no longer be an America for Americans.

United States Immigration Service Board of Review.

THE United States Immigration Service Board of Review, established at the beginning of 1922 in the Department of Labor at Washington, D. C., is known as The Secretary's Board of Review, the organization being under the personal supervision of the Secretary of Labor. This new governmental agency is practically a court of appeals for the hearing and adjustment of exceptional cases coming up under the act[1] approved May 19, 1921, restricting "the number of aliens of any nationality who may be admitted under the immigration laws to the United States in any fiscal year to 3 per cent of the number of foreign-born persons of such nationality resident in the United States," as shown by the 1910 census.

The law was passed to avert a threatening avalanche of immigration at a time of great economic depression. In the fiscal year of 1921 before the provisions of this act went into effect the number of arrivals was 805,228, exclusive of nonresident or tourist aliens and foreign seamen examined by the Immigration Service, the latter two classes bringing up the total to 2,117,502, a number far above any previous year's record. The Secretary of Labor reports that, on the whole, the 3 per cent law has fully met the emergency for which it was designed.

There is a board of inquiry at every port of entry, but numerous immigration cases are not covered exactly by the terms of the law or involve serious hardships to individual immigrants. Such cases, sometimes 75 or 100 per day, are referred to the Board of Review, which is composed of the following five members, all of whom have had long experience in the United States Department of Labor:

Robe Carl White, chairman.
Terence V. Powderly (former Commissioner of Immigration).
Albert E. Reitzel.
Edward J. Shaughnessy.
George W. Bope.

In all cases the findings of the board are referred to the Secretary of Labor or to the Assistant Secretary of Labor for final decision.

The number and character of the cases handled in January, 1922, were as follows:

[1] For analysis of the law, see MONTHLY LABOR REVIEW, July, 1921, pp. 222-226.

undertake to facilitate the conclusion and carrying out of agreements between the competent departments of the United States of Brazil

	Cases.
Alien contract labor	46
Chinese cases	58
Dangerous contagious diseases	29
Loathsome contagious diseases	38
Crimes involving moral turpitude	61
Crimes involving prostitution	19
Stowaways	30
Communists	10
Without passport	49
Aliens unaccompanied under 16	21
Aliens assisted	56
Accompanying aliens	29
Coming as excess quota	208
Likely to become public charges	595
Physically defective	126
Feeble-minded	27
Insane	14
Entering without inspection	149
Illiterates	193
Coming from "barred zone"	4
Deaf and dumb	3

An alien in an appeal case may appear before the board or may be represented by an attorney or other interested person. The appealed cases are most frequently handled through representatives, as the travel to and from Washington, D. C., together with the expense of lodging while there would constitute too great an expense for many of the immigrants.

The majority of the exceptional cases concern undesirables in regard to which a strict adherence to the letter of the law is very difficult or impossible. The Secretary of Labor states that although the Board of Review has been in operation but a few months it has already simplified the workings of the so-called "3 per cent law and has eliminated nearly all the cases of threatened individual hardship or distress that were certain to arise from a law at once so strict and so suddenly applied."

Agreement on Labor and Emigration Between Italy and Brazil.[1]

ON OCTOBER 8, 1921, after negotiations lasting more than a year, the Italian commissioner general of immigration and the Brazilian ambassador at Rome signed on behalf of their respective Governments an agreement on labor and emigration which will come into force as soon as it has been ratified by the competent authorities in the two countries. The agreement contains eight articles preceded by a declaration to the effect that the two Governments intend later to negotiate a general treaty on labor and emigration for the benefit of their respective nationals.

Article 1 of the agreement prescribes equality of treatment in compensation for industrial accidents to Brazilian and Italian workers in either of the two countries and to their survivors. Article 2 recognizes the full validity of individual or collective labor contracts concluded in Italy for execution in Brazil, provided that they are not subversive of public order. Under article 3 the two Governments

[1] Bollettino della Emigrazione, Rome, October, 1922. International Labor Review, Geneva, February, 1922.

undertake to facilitate the conclusion and carrying out of agreements between the competent departments of the United States of Brazil and the Italian commissioner general of emigration concerning the conditions of employment of Italian workers, provided that these agreements are previously submitted to the Federal Government and to the Government of the State in whose territory the agreements are to be carried out. This article together with article 2 are of fundamental importance in view of their practical object. The detailed regulation in an agreement or treaty of all questions concerning the transport and employment of Italian immigrants in Brazil would have encountered serious difficulties. The agreement has undertaken to overcome the difficulties of a uniform fixed regulation of such complex questions, leaving this task to other less solemn but more flexible instruments, which are, however, so to say, put under the protection of the present agreement.

Article 4 requires the Brazilian Government, as soon as its national labor department has been established, to institute strict inspection of labor and to supervise the protection and placing of Italian immigrants so as to insure that employment contracts are satisfactorily carried out. Under article 5 the Brazilian Government undertakes to afford facilities for the creation and conduct among Italian agricultural workers of consumers', credit, labor, and productive cooperative societies, and of insurance and benefit associations. Article 6 guarantees to Italian immigrants in Brazil all the benefits or privileges accorded now or in the future to immigrants of other nationalities. Article 7 binds the Brazilian Government to afford facilities for the work of regularly constituted Italian associations in Brazil for advising and assisting Italian immigrants in their work. The last article, article 8, provides that the agreement shall remain in force until denounced by either of the two States on at least six months' notice.

In application of this agreement, the Italian commissioner-general of emigration has approved the text of a model employment contract for use between Italian workers and owners of Brazilian plantations. This form has already been adopted by two large Brazilian companies which recruit labor for the coffee plantations of the State of São Paulo.

Under the terms of these contracts the Italian workers, with their families and baggage, are conveyed free of charge from their homes to the plantations. They are given free accommodation in São Paulo while passing through that city. On their arrival in São Paulo their contract is transferred from the recruiting company to the plantation owner, according to a previous understanding with the Italian consul or his representative. At this stage wages are fixed according to the terms of the contract; they must be at the prevailing rates for the district and be paid on the usual conditions. They are to be revised every year by the chairman of the recruiting company and the Italian consul or their representatives. The contract runs for three years, except in case of force majeure, sickness, or obvious inefficiency. The owner may not transfer immigrant workers from one plantation to another without their consent.

Houses and pasture land must be provided free of charge by the management of the plantation. The privacy of the home of the immigrant is inviolable, except in cases of crime or danger to public

(8) Protection of the rights and interests of emigrants in their place of employment.

safety. Agents of the management may enter the houses of the workmen only by a written authorization from the State to see that sanitary requirements are fulfilled; these requirements are enumerated in the contract. The management must also provide medical assistance up to a value of 3,000 reis ($1.64, par) per month per family. Medical supplies must be provided at cost price, if the plantation is more than 10 kilometers (6⅓ miles) from a town, but the workers are entitled to obtain their own medical supplies outside the plantation if they so wish. They are not obliged to buy from the shops set up by the management. The owner of the plantation must maintain the necessary schools for the education of the immigrant's children. In these schools instruction in the language, history, and geography of Italy is to be compulsory for the children of Italians.

Italian consuls, their representatives, and agents of Italian associations recognized by the State of São Paulo are to have free access to the plantation in order to see that the terms of the contract are carried out in every respect. Disputes arising out of a contract should be brought to the knowledge of an Italian consul, who will endeavor to settle them.

Fines are prescribed as penalties for failure to observe the terms of the contract. They may not exceed 25,000 reis ($13.66, par), according to a scale drawn up by the chairman of the company and the Italian consul. Fines will be paid into a special fund for establishing associations among the immigrants, either for assistance in case of invalidity, accident, or death, or for physical training, or for repatriation. This fund will be administered under the supervision of the chairman of the company and the Italian consul. If the commissioner-general so requires, the recruiting company must deposit security in Italy for the execution of the contract.

Creation of an Emigration Bureau in the Polish Ministry of Labor.[1]

BY AN order of the council of ministers which became effective on May 1, 1920, there has been created in the Polish Ministry of Labor and Social Welfare a Bureau of Emigration. The sphere of activities of this bureau is to include:

(1) The drafting of laws and orders relating to matters coming within the jurisdiction of the bureau.

(2) The drafting jointly with the Ministry of Foreign Affairs of emigration treaties and of all international agreements relating to emigration, repatriation, and immigration.

(3) Control of the recruiting of labor for work in foreign countries.

(4) Action against injurious propaganda and illegal recruiting of emigrants.

(5) The securing of information on conditions in foreign countries and the communication of this information to interested persons, institutions, and authorities.

(6) Organization of the transport of emigrants.

(7) Aid to emigrants and returning emigrants during the voyage.

[1] Bollettino della Emigrazione, Rome, November-December, 1921.

(8) Protection of the rights and interests of emigrants in their place of employment.

(9) Aid to returning emigrants immediately after their repatriation.

(10) Collaboration with the Ministry of Finance in the organization of the transmission of savings of the emigrants to their native country.

(11) Protection of societies and social and economic institutions in Poland and abroad which have as their object the assisting of emigrants and returned emigrants and the supervising of their activities.

(12) The granting of licenses to foreign shipping companies for the sale of third-class passage in Poland.

(13) The compilation conjointly with the Central Statistical Office of migration statistics.

At the head of the bureau is a director. The work of the bureau is carried on through the commissioner of emigration at Danzig and the State employment and aid offices for emigrants.

The earnings of employees paid by the ton in the shipping mines aggregated $80,309,689, an average of $1,393.78 annually per employee, or $8 a day for each day worked.

WHAT STATE LABOR BUREAUS ARE DOING.

Illinois (Coal Mines), 1921.

ACCORDING to the fortieth annual coal report of Illinois for the year ended June 30,1921, the annual production of coal has increased in these four decades from 12,000,000 to over 80,000,000 tons annually, and the number of men engaged in the industry has risen from 30,000 to 95,763. Some of the most important data contained in the volume are as follows:

COMPARATIVE SUMMARY FOR THE YEARS ENDED JUNE 30, 1920, AND 1921.

Item.	1920	1921	Increase.	Decrease.
Number of counties producing coal	53	53		
Number of mines operated	938	1,035	97	
Total output of all mines	73,920,653	80,121,948	6,201,295	
Number of shipping mines	373	389	163	
Output of shipping mines, tons	72,409,610	78,339,082	5,929,472	
Number of local mines	565	646	81	
Output of local mines, tons	1,511,043	1,782,866	271,823	
Tons shipped	46,861,490	50,836,570	3,975,080	
Tons sold to railroad companies	20,457,052	22,228,449	1,771,397	
Tons supplied to locomotives	499,080	506,993	7,913	
Tons sold to local trade	3,200,721	3,518,677	227,956	
Tons consumed and wasted at the plant	2,381,375	2,536,713	155,338	
All coal not sold June 30	430,935	494,546	63,611	
Average days worked, shipping mines	176	174		2
Average days worked, local mines	148	140		8
Average days worked, all mines	159	152		7
Tons washed or rescreened	6,578,598	6,436,016		142,582
Number of mines using machines	208	243	35	
Number of machines used	2,330	2,758	428	
Tons undercut by machines	45,130,699	50,338,449	5,207,750	
Tons mined by hand	28,388,931	29,783,499	1,394,568	
Number of employees in shipping mines	85,037	92,080	7,043	
Number of employees in local mines	3,155	3,683	528	
Total number employed	88,192	95,763	7,571	
Number of motors in use	1,228	1,424	196	
Number of men accidentally killed	181	222	41	
Number of men injured, losing 30 or more days	3,571	4,327	756	
Tons mined to each life lost	408,401	360,910		47,491
Number of employees to each life lost	487	431		56
Number of deaths per 1,000 employed	2.04	2.3		0.01
Tons mined to each man injured	20,700	18,517		2,183
Number of employees to each man injured	25	22		3

The following table shows the tons mined, the average price per ton in the State of Illinois for hand and machine mining at shipping and local mines, and total earnings:

AVERAGE PRICE PER TON, AND TOTAL EARNINGS IN HAND AND MACHINE MINING, 1921.

Item.	Average price per ton paid for mining.	Total earnings.
Hand mining:		
Shipping mines	$1.089	$30,405,509
Local mines	1.332	1,914,810
Total	1.101	32,320,319
Machine mining:		
Shipping mines	.991	49,904,180
Local mines	.963	38,078
Total	.991	49,942,258

Montana.[1]

The earnings of employees paid by the ton in the shipping mines aggregated $80,309,689, an average of $1,393.78 annually per employee, or $8 a day for each day worked.

The report states that progress continues to be made in the mining industry both in equipment and mining methods and in the employees' working conditions. Training in mine rescue and first-aid work is being expanded and State inspections are being made more and more efficiently and scientifically.

Louisiana.

THE commissioner of labor of Louisiana, under date of April 3, 1922, states that he is to submit the eleventh biennial report of his department to the governor and to the law-making bodies at the session of the legislature which convenes May 8, 1922. This report will contain an industrial directory giving the addresses of employers and the number of employees in the industries of the State (manufacturing and repair plants).

In order to ascertain employment conditions, hours, and wages at the close of March, 1922, agents of the department have been making inspections and surveys, particularly in the sugar and lumber industries, railroad work, and the building trades.

The latest statistics indicate a very considerable increase in unemployment compared with 1920 and the early part of 1921. Conditions, however, showed some improvement in the first two months of the present year. There have been substantial reductions in wages in all occupations. Workers in the sugar and lumber industries have been obliged "to accept practically prewar scales," the average wage decrease in such industries being 46 per cent. Hours of labor have been lengthened. Where employees previously worked 8, 9, or 10 hours a day they are working from 10 to 11 hours, and in the sugar industries 12 hours. Many of the smaller lumber operators have shut down, and will remain so until business improves. Others are running part time, some of them only 3 days a week, trying to hold their workers.

During 1921 over 1,800 places of employment were inspected and approximately 123,000 workers covered. The inspectors found but few violations of either State or Federal labor laws.

A State free employment bureau has been created under the supervision of the commissioner of labor. Offices have been established at New Orleans, Shreveport, and St. Charles. The office at New Orleans has enrolled about 3,500 persons, mainly unskilled or semiskilled workers.

The department has been making a "fight" to have fire escapes erected. Practically 75 were put up in the last year, and in the past two years the number erected was greater than in any preceding four years.

board has been formed composed of 12 prominent bakers of Pennsylvania and 2 representatives of the bakers' union.

Testing of safety appliances.—A realization of the need for labora-

Montana.[1]

THE promotion of the establishment of free employment offices is at present the chief activity of the division of labor and publicity of the Montana Department of Agriculture, Labor, and Industry. The law provides for the maintenance of such offices in all the first and second class cities of the State, the expense to be borne by the cities themselves. These agencies are required to report to the division of labor and publicity. The chief of that division has been appointed Federal director of employment for Montana of the United States Employment Service. If practicable, cooperation between that service and the municipal employment offices will be established.

Pennsylvania.[2]

AFTER a consideration of the criticism submitted at the two public hearings concerning minors in theatrical performances for pay it was decided by the Pennsylvania Industrial Board that a representative committee be designated from the persons who attended the hearings to examine all the information at hand and formulate recommendations for submission to the board.

Before the middle of April another representative committee will be named by the commissioner of labor and industry to redraft the tentative ruling on industrial home work.

Public hearings.—Public hearings are scheduled for April on the tentative revised mechanical power transmission code, the tentative laundries code, and the tentative moving-picture regulations.

Tentative code for dyeing industry.—A code on machinery safeguarding in dyeing and finishing of textiles has been submitted to the Industrial Board by the Master Dyers' Association of Philadelphia and is to be presented for public hearing before final adoption. This is the first time a Pennsylvania association has drafted a code at its own expense and submitted such measure for adoption throughout the State. This code, which is illustrated, has seven parts: (1) General instructions pertaining to guards; (2) dyeing of loose fibers; (3) slubbing and cap dyeing; (4) dyeing of yarns; (5) piece dyeing; (6) hosiery dyeing; and (7) silk dyeing.

Preparation of the building code.—Three sections of the tentative draft of the building code are already completed. They deal, respectively, with assembly, residence, and business buildings. Engineering requirements are taken up in section 4. New conditions in the building industry have necessitated prolonged work and study for the preparation of this code which "is the most comprehensive and pretentious draft of safety regulations that has ever been attempted by the Industrial Board and its building code committee."

Safety standards in the baking industry.—In connection with the application of safety standards in the baking industry an advisory

[1] Information received in a letter of Apr. 1, 1922, from Montana Department of Agriculture, Labor, and Industry.

[2] Bulletin of Information issued by the Industrial Board and press release from the Pennsylvania Department of Labor and Industries, Harrisburg. March, 1922.

to female workers. There were several cases of prosecution and

board has been formed composed of 12 prominent bakers of Pennsylvania and 2 representatives of the bakers' union.

Testing of safety appliances.—A realization of the need for laboratories to examine and approve safety appliances has led the State Industrial Board to have recourse to several expedients. It has "recently ruled that in certain cases affidavits accompanying the application for approval will be passed by experts, representative of labor, the manufacturers, and insurance carriers." The devices are also to be examined by these experts in order to avoid the delays which would ensue were the tests made by an outside agency. Some of the board's tests are made by the United States Bureau of Standards, the laboratories of the Pennsylvania State College, and the Carnegie Institute of Technology.

Use of second-hand curled hair in upholstery work.—The division of hygiene and engineering is making an investigation into the use of second-hand curled hair in upholstery work. It is claimed that such hair is commonly used by furniture manufacturers and upholsterers without being sterilized and cleaned except by picking and is purchased from second-hand dealers who gather it from dumps and in other ways. After this study is completed the results will be submitted to the Industrial Board for a ruling to cover the industry.

Ruling on child labor.—On April 14, 1922, the following ruling became effective:

Rule M-38. That the employment of minors under 16 years of age on coal dredgers is within the meaning of section 5 of the Child Labor Act of 1915, and is prohibited.

Compilation of labor laws.—A compilation of the labor laws of Pennsylvania is now in the hands of the printer. The volume was prepared by the Industrial Board with the cooperation of the Legislative Reference Library and the attorney general, in compliance with numerous requests.

Texas.

A RECENT typewritten report from the commissioner of labor of Texas gives the following information regarding the activities of the State bureau of labor statistics from February 1, 1921, to January 31, 1922, the first year of his administration:

Number of cities and towns covered by inspections	133
Number of employing establishments visited	2,131
Number of inspections made therein	2,335
Number of workers in establishments inspected	97,961
Males	54,196
Females	43,765
Number of orders left with employing concerns requiring changes and improvements	639
Number of cases handled under child-labor law	954
Number of inspections of derailing devices on railroads	103

Inspections were made in 1,811 establishments with particular reference to the requirements of the health, safety, and comfort law and the 9-hour day and 54-hour week law affecting woman wage earners. To fulfill the provisions of the first-mentioned law, the bureau's representatives issued 328 orders; to meet the requirements of the latter law, 127 orders, 49 of which were relative to overtime payments

Average weekly earnings in February, 1922, were $21.44, or $1.62 more than in the preceding month. Average weekly earnings are

to female workers. There were several cases of prosecution and assessments of fines.

During the year $7,560.60 was collected for license fees, occupation taxes, etc., from the 58 private employment agencies under the bureau's license and control.

General statistical data regarding employment conditions were obtained and made public. A special investigation was undertaken in the east Texas lumber camps.

In accordance with the provisions of the semimonthly pay-day law, with the enforcement of which the commissioner is charged, the bureau of labor statistics has given consideration during the year covered by the report to 341 cases in re nonpayment of wages. While several thousands of dollars were collected, "the records show unpaid wage claims of $112,946.89 still pending."

In assisting in the collection of wage claims the bureau of labor statistics has found the law very inadequate, particularly in cases where employers were dishonest. In the oil industry the workers "have been fleeced of their wages in a most startling and unjust manner," the files including 268 wage claim cases against 95 oil companies which "have cheated their employees out of wages amounting to $106,570.39." There were numerous other cases which were not referred to the office of the commissioner. That bureau has endeavored by all available peaceful and legal methods to force the payment of just claims referred thereto. Many of these companies conduct their business "under a declaration of trust, drawn up by shrewd lawyers, and have no other purpose than to swindle their employees and other creditors." In the majority of cases the workers do not apply soon enough to the bureau for aid and are deceived by promises of payment until it is too late for the commissioner's office to interfere successfully. It should be understood, however, in this connection that "no complaints have been filed against the old established oil companies."

The bureau proposes to recommend the passage of adequate and just legislation on wage payments. Data relative to the subject are being collected for presentation to the governor of the State and to the next legislature.

Wisconsin.

THE Monthly Progress of Work Report of the Industrial Commission of Wisconsin for February, 1922, contains an account of general working conditions, a summary of which is given below:

Industrial conditions.—The increase in the number of persons employed in factories and mines in February, 1922, was only 0.5 per cent over those employed in the first month of this year. Total wages rose 8.7 per cent in February and average weekly earnings 8.2 per cent. The number of persons employed that month was 32.9 per cent less than the number employed in July, 1920, while the decrease in total wages was 48.5 per cent and in average weekly earnings 22.7 per cent. These figures are based upon returns from 211 large employers who have been reporting monthly since July, 1920. Their pay rolls cover about one-third of the workers in the factories and mines of Wisconsin.

Child labor in beet fields.—An investigation was carried on last fall

Average weekly earnings in February, 1922, were $21.44, or $1.62 more than in the preceding month. Average weekly earnings are still over $26 in stone finishing, railroad repair shops, printing and publishing, and in the light, power, and chemical plants, but are below $20 in the woodworking industries, boots and shoes, hosiery and other knit goods, baking and confectionery, and laundries and dry cleaning.

General orders.—The general safety orders for mines are awaiting the commission's final action. The revision of the orders on safety in building construction will soon be ready to be submitted for public hearing. Proposed changes in the new electrical safety code will be presented to an advisory committee in April.

First-aid courses.—In January, February, and the early part of March the United States Bureau of Mines Safety Service Car No. 10 gave first-aid courses in 11 cities in Wisconsin. The chief purpose of the trip was to give quarrymen an opportunity to train their workers in first-aid in conformity with the new general orders regarding quarries. In some of the cities where the car stopped, industrial establishments and police officers availed themselves of the chance to secure instruction in first-aid. First-aid clubs were formed at Red Granite, Lohrville, and Berlin to keep up interest in the subject.

Ventilation engineering.—The ventilating engineer of the commission has recently been giving particular attention to the problem of removing dust in grain elevators. It is generally conceded at present that it is mechanically possible to collect the dust in elevators and to reduce substantially the hazard of dust explosions. A State-wide conference on the problem was scheduled for March 21, 1922. Elevator men maintain that the removal of dusts from grain will not be looked upon with favor by the shippers.

The ventilating engineer is planning a campaign for the solving of ventilating problems in garages, laundries, slaughterhouses, and tanneries.

Woman and child labor inspections.—In February the female deputies visited 269 establishments, 85 of which had no women employed. Woman and child labor surveys have been made in Baraboo, Manitowoc, and Menasha followed up by letters from the secretary of the commission to the local newspapers, reporting briefly on the conditions found by the inspector and setting forth the main legal requirements regarding the employment of women and children.

Child labor, Milwaukee.—The Milwaukee office issued 649 permits in February, 1921, and in February, 1922, only 369. The decrease was chiefly in the number of reissued permits, the industrial situation apparently causing a reduction in turnover among child workers as well as among adult laborers.

During February, 1922, 334 children who had temporary permits to work were given new physical examinations which resulted in the granting of permanent permits to 71 of these children and in the extension of the temporary permits of the remaining 263 in order to allow more time for the correction of minor physical defects. The placement bureau's records for February of the present year show 147 children of permit age registered, 53 orders from employers, 87 children referred to positions, 43 known to have been placed (all on full time), 22 of them in domestic service.

Child labor in beet fields.—An investigation was carried on last fall of labor conditions in the sugar-beet fields of 6 Wisconsin counties. A more comprehensive study is to be made in May and June of the present year.

Minimum wage.—Not only are there many more violations of the minimum wage law reported now than a year ago but a greater number of women are employed at the minimum wage than formerly. Comparatively few employers, however, have reduced wages below the minimum rates.

Sporadic cases of the substitution of men for women are reported but in general there has been far less reduction in the number of female workers than in the number of male workers. Even in factories where men might easily be substituted for women, it has not been done on any large scale, and the first requests for female timekeepers have recently been received by the Milwaukee employment office.

Home work.—To facilitate compliance with the new home-work law, application blanks for securing permits to give out home work are to be sent to the various manufacturers who are known to distribute such work. All local health officers will be instructed by letter as to their duties in connection with the home-work law and it is planned to have the standards of inspection formulated by an advisory committee.

Labor conditions in canning factories.—There were only a few slight violations of the pea-canning rules for 1921. One-half of the women working in the pea canneries received 25 cents per hour, 3 cents more than the commission's established minimum rate. Few of the canneries availed themselves of the maximum hours permitted by the pea-canning rules.

Only one serious overstepping of the hours of labor rules is reported among the bean, cherry, corn, and tomato canneries.

Apprenticeship.—At the close of February the number of indentured apprentices in the State was 1,279, a gain of 25 over the preceding month. The majority of the new contracts were in the building trades. The first indentures ever entered into in business lines were concluded in February. A Milwaukee commission house indentured a boy apprentice for traffic work and several druggists entered into apprenticeship agreements to teach elements of pharmacy as well as business methods and salesmanship. It is planned to have representative committees to draft "schedules of training" and to establish standard wage scales for different business lines. A survey of apprenticeship in the building trades was conducted in Appleton. Thirteen out of 36 contractors had no employees, while 72 journeymen, 18 helpers over 21 years of age, and 2 minor apprentices were employed by the other 23 contractors. It is probable that the large number of adult helpers in the building trades has impeded the development of apprenticeship in such trades. Very little advance along this line can be looked for until contractors are more willing to employ boys under 21.

by the United States Public Health Service and has passed an oral

CURRENT NOTES OF INTEREST TO LABOR.

Howat Cases Dismissed by United States Supreme Court.

THE Supreme Court of the United States recently had before it two cases on writs of error to the Supreme Court of Kansas seeking a ruling on the constitutionality of the law of that State establishing a court of industrial relations. Plaintiffs in error, Alexander Howat and others, had been sentenced to confinement in jail until they should testify under a subpœna before the court named, and afterwards were sentenced to one year's imprisonment for contempt, having violated an injunction issued by the District Court of Crawford County forbidding the calling of a strike in violation of the industrial relations law. These cases were joined, and a decision of March 13, 1922, dismissed them on the ground that the questions involved were disposed of by the court of Kansas on principles of general and not Federal law, so that a Federal court had no jurisdiction. Mr. Chief Justice Taft delivered the opinion of the court.

Extension of the Training of Foremen in the Paper Industry.[1]

THE success of the experiment in the training of foremen carried on by the paper industry and the Federal Board for Vocational Education at Canton, N. C., has resulted in similar instruction being given in one of the paper mills at Erie, Pa., while large paper mills in New York, Massachusetts, and Wisconsin are ready to follow suit. Preparation for this unusual kind of technical instruction was begun by the paper industry about three years ago. The lack of suitable textbooks at once became apparent and a fund of $40,000 was raised by the American and the Canadian paper and pulp associations to enable the technical associations of the United States and Canada to furnish such texts. The first two of these books comprising preparatory instruction in the basic sciences are now in use in some of the mills, and a third dealing with the actual work on pulp will be issued soon.

First-Aid Training for Officers of the Merchant Marine.

AN AMENDMENT to the general rules and regulations of the Board of Supervising Inspectors which has recently been approved by the Secretary of Commerce provides, according to Public Health Reports, March 31, 1922 (p. 758), that "no candidate for original license as master, mate, pilot, or engineer shall be examined unless he has completed a course of instruction in 'first aid' approved

[1] The Paper and Pulp Industry, Mar. 15, 1922, p. 5.

Workers' College at Katonah, N. Y.[1]

BROOKWOOD, the first resident college for workers in this

by the United States Public Health Service and has passed an oral examination based on a Manual on Ship Sanitation and First Aid recently prepared by the Public Health Service in cooperation with the Seamen's Church Institute of New York City."

It is believed that this provision will be of the greatest service to officers and men on vessels which do not carry a ship's doctor and which lack facilities for the care of the sick and injured. Ignorance of the elementary rules of sanitation and hygiene are frequently to blame for poor sanitary conditions on shipboard, and it is extremely advisable from both a humanitarian and economic viewpoint that the sanitary conditions should be improved, since illness among members of the crew which could have been avoided by simple medical treatment or the application of fundamental principles of sanitation is often the cause of vessels having to run shorthanded.

Course in Industrial Lighting for Factory Inspectors in Massachusetts.

THROUGH the courtesy of the Massachusetts Institute of Technology, a short intensive course in industrial lighting has been given for the benefit of industrial inspectors in the department of labor and industries. The purpose of the course was to provide better equipment for the inspectors in applying the new lighting code when it goes into operation. A tentative lighting code has been published by the department and is now available for distribution. A hearing on the question of adopting a mandatory code will be held on May 16.

Fair Wages for Prisoners in New York State Prisons.

IMPROVEMENT in conditions existing in the State prisons is looked for as a result of the recent passage [1] by the New York Assembly of three bills affecting labor and production within the prisons. According to the provisions of the first bill, fair wages will be paid to prisoners. Inmates now receiving on an average 1½ cents a day for their work will under the new law receive all profits obtained from their production minus the cost of their maintenance. The second bill provides for the creation of a bureau of standards whose duty it will be "to work out a system of standardization of production in the prisons whereby the several State departments will be able to make purchases from the penal institutions to meet their needs." Under the third measure a department of purchase will be organized which will have charge of all purchasing for the State and will supply all available needs from the prison shops if possible.

It is believed that the reforms effected by this new legislation will encourage the prisoners to produce capacity output each day and eliminate the practice of "ca canny" which has been growing more common. The new statutes provide an additional incentive to output by making the inmate's family the first beneficiary of the profits of his labor.

[1] Christian Science Monitor, Mar. 18, 1922, p. 4.

Introduction of Profit Sharing in the Krupp Works at Essen [1]

Workers' College at Katonah, N. Y.[1]

BROOKWOOD, the first resident college for workers in this country (see MONTHLY LABOR REVIEW, June, 1921, p. 193), and located at Katonah, N. Y., has been in operation for some months. This experiment in adult education is being carried out under the supervision of two committees, one of which consists of the presidents of the federations of labor of several States and representatives of several trade-unions, including the teachers' union of New York City, and endeavors to enlist the cooperation of labor organizations in the work and to see that the courses offered are applicable to the needs of the labor movement. The other committee, composed of professors from Columbia University, the University of Pennsylvania, and Amherst College, is an advisory body which assists in so planning the courses offered as to make them valuable to the class of students for whom they are intended.

About 20 students, 7 of whom are women, are in attendance this year. This number is all that can be accommodated at present. The students, most of whom are from positions of some sort in labor organizations, are older than those in colleges generally, the average age being 25 years. The government of the college is democratic, each member—student or teacher—having one vote in its management. All students are carrying the same work during the first year of the operation of the college, namely, history of civilization, economics, statistics, English literature, grammar for those who need it, and a course in debate and argumentation. Once a week a debate is held and the following day a period of two hours is devoted to criticism of the "effectiveness of the argument and the soundness of presentation." The plan for the second year's work is not yet completed, but the program will likely include courses in labor tactics, social psychology, some science, advanced statistics, and farm and labor journalism.

Canadian Coal Statistics, 1921.[2]

ACCORDING to a report on coal statistics in Canada during the year ending December, 1921, issued by the Dominion Bureau of Statistics, the total output of coal for that period was nearly 15,000,000 short tons valued at $74,273,000 or $4.97 per ton.

The 1921 output was 88 per cent of that of 1920, which was 16,900,000 tons. The coal production of last year included 96,964 tons of anthracite, 1,627,800 tons of bituminous, and 3,217,654 tons of lignite.

The amount of Canadian coal exported in 1921 was 1,987,276 short tons and in 1920, 2,558,223 short tons. During 1921, 18,102,620 short tons of coal were imported into Canada, about 84 per cent of the amount imported the previous year.

[1] Bulletin of the Consumers' League of New York, March, 1922, p. 2.
[2] The Labor Gazette (Canada). Ottawa, p. 323. March, 1922.

atmospheric conditions in deep and hot mines; £3,000 ($14,599.50, par) for extra lecture room and laboratories at one of the mining schools, and several smaller grants, the amounts of which are not given [illegible]

Introduction of Profit Sharing in the Krupp Works at Essen.[1]

WHILE the participation of workmen in the profits of their employer, through bonuses or holdings of small blocks of stock, is not unknown in Germany, although it can not be said to be common, the importance of the firm of Krupp of Essen (Fried. Krupp Aktien Gesellschaft) attaches unusual interest to the announcement that its employees are to be given opportunity to become stockholders in the enterprise.

The Krupp company, compelled after the war to abandon the manufacture of arms, has turned its energies to the manufacture of a wide range of commodities. Until 1921 it had paid no dividend for three years. In 1921 it declared a dividend of 6 per cent and increased its capital by 250,000,000 marks ($59,500,000, par). An as yet undetermined amount of the new stock is to be made available to the employees of the company at a low price, which has not been fixed. Only workmen who have been in the employ of the company for at least five years will be permitted to become shareholders. They will be consolidated in an association to be called "Krupp'sche Treuhand," (Krupp Trust Fund), which will administer their holdings and disburse and account for the earnings of the stock. The annual earnings shall not amount to less than 6 per cent or to more than 10 per cent of the value of each share. One representative of the association will be given a place on the board of directors of the firm.

While the press has greeted the new policy with approval, the workmen's council at the Krupp plant has warned the workmen against taking advantage of the opportunity offered them of becoming shareholders. The council said in part:

> Although we take for granted that the influence of workmen shareholders in the factory will be negligible, we see in this experiment a great peril to general labor. It can not lead to a healthful development of the factory if some men taken from the ranks of the laborers are to be considered as cooperating in the enterprise. Through such a step opposition of interests will be created which can result only in great damage to the general labor cause. The feeling of solidarity which we consider absolutely necessary for the working classes would be attacked and imperiled. A sense of our responsibility causes us most strongly to warn against such participation the masses of workmen represented by us.

British Miners' Welfare Fund.[2]

UNDER the provisions of the Mining Act of 1920 a fund was established to be used for the social well-being, recreation, and living conditions of workers in and about coal mines as well as for the advancement of mining education and research. The fund, which is made up by a levy of 1 penny on each ton of coal mined, is administered by a committee appointed by the Board of Trade.

According to a report from the mines department the first grants were made from the fund on February 28, 1922, as follows: £12,000 ($58,398, par) for research work on miners' safety lamps and coal-dust dangers, £1,000 ($4,866.50, par) for research on the control of

[1] Consular report from Berlin, dated March 4, 1922.
[2] Labour Gazette, London, March, 1922, p. 111.

Reorganization of Spanish Department of Labor.

atmospheric conditions in deep and hot mines; £3,000 ($14,599.50, par) for extra lecture room and laboratories at one of the mining schools, and several smaller grants, the amounts of which are not given, for the promotion of local recreation schemes.

Provision of Unemployment Insurance, by Industries, in Great Britain.[1]

THE question as to what possible extent unemployment insurance may be borne by individual industries rather than by the Government has for quite a time been under consideration by the British Ministry of Labor, and the minister of labor has recently taken measures to secure from the principal employers' associations and trade-unions their considered opinion as to a practical solution of this problem along the lines suggested. To this end he has asked each industry to submit the best method of dealing with unemployment insurance in the trades composing it. The Unemployment Insurance Act, 1920, made provision whereby schemes of this kind could be arranged and administered by associations of employers and employed in given industries, but owing to the general industrial depression little use has been made of the opportunity afforded by the act. Furthermore, the financial burden caused by the recent unprecedented unemployment has made temporarily impossible the cooperation of the Ministry with trades that were interested in such an arrangement. The minister states that as soon as the balance in the central fund is again large enough he will welcome and encourage the establishment of schemes for dealing with unemployment insurance on an industrial basis.

Measures for Improvement of Working Conditions in Carpet Factories in Persia.[2]

FRIENDLY representations have been made several times by the International Labor Office to the Government of Persia relative to very objectionable labor conditions for women and children in certain Persian carpet factories, particularly in Kerman and its neighborhood. As an outcome of such representations, a committee has been organized in that city in conformity with the Government proposals to conclude an agreement with employers in the carpet-making industry or to adopt regulations for the welfare of the employees.

The regulations, which were to be effective as of December 10, 1921, are to be based on the following principles:

1. Complete liberty and equality of right on both sides in regard to the conclusion of labor agreements;
2. Registration of labor agreements;
3. Introduction of a compulsory 8-hour day, pieceworkers to be left free in this respect;
4. Provisional increase of 5 per cent in wages;
5. Weekly rest and holiday on festivals to be compulsory.
6. Employers guilty of violating these regulations to be held responsible.

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[1] Labour Gazette, London, Mar., 1922, p. 106.
[2] Official Bulletin of International Labor Office, Geneva, Dec. 21, 1921, and Mar. 15, 1922. Information used from latter bulletin taken from "Setareye Iran" of Dec. 23, 1921.

Reorganization of Spanish Department of Labor.

A CONSULAR report from Madrid, Spain, under date of March 4, 1922, states that by a royal order of February 20, 1922, certain departments under the Ministry of Public Works have been transferred to the Department of Labor, the title of the latter being changed to Ministry of Labor, Commerce, and Industry. Those departments of commerce and industry having particularly to do with the promotion of domestic commerce and industrial activity have been incorporated into the new ministry, leaving mines, aero stations, civil aviation, the merchant marine, maritime communication, and naval construction still under the Department of Public Works. The schools of industrial engineering, grain elevators, statistics, and the geographical and statistical institute are likewise incorporated into the Ministry of Labor, Commerce, and Industry.

Permanent Court of International Justice and the International Labor Organization.[1]

THE Permanent Court of International Justice, inaugurated at The Hague on February 15, 1922, was organized according to the constitution approved at the first assembly of the League of Nations, December 13, 1920. The 15 judges and 4 deputy judges composing this court are elected by the assembly and by the council of the League of Nations "from amongst persons of high moral character" who have "the qualifications required for appointment to the highest judicial offices in their respective countries, or are jurisconsults of recognized competence in international law."

The court has authority to deal with all questions that may be presented to it by the parties concerned.

After the inaugural ceremony the court held private sessions in order to establish its standing orders and code of procedure. It seems probable that at the court's first regular session matters of special interest to labor will be submitted, among them the question raised by the Government of France at the third international labor conference at Geneva, which concerns "the competence of the conference and the international labor organization in agricultural matters."

The court will also be called upon to interpret article 389 of the Peace Treaty relative to the nomination by the members of the League of Nations "of nongovernment delegates and advisers chosen in agreement with the industrial organizations most representative of employers or workpeople, as the case may be."

In addition to the court's plenary sittings there is to be a labor bench with five judges, who will have the assistance of four technical assessors, who will be selected in each case from a panel of "assessors for labor cases," composed of two persons designated by each member of the League of Nations and "an equivalent number nominated by the governing body of the International Labor Office."

Copies of all the written proceedings of the court will be furnished the director of the International Labor Office, such office being at liberty to supply the court with all necessary data in labor cases.

[1] Industrial and Labor Information, vol. 1, No. 9, Mar. 3, 1922. International Labor Office, Geneva.

PRODUCTION OF COAL IN ALLEGANY AND GARRETT COUNTIES IN THE YEAR ENDING MAY 1, 1920, AND IN THE PRECEDING YEAR.

OFFICIAL PUBLICATIONS RELATING TO LABOR.

United States.

ALABAMA.—*Child Welfare Department. Child labor division. Instructions to superintendents, principals, and other school authorities for the issuance of employment certificates and newsboys' badges as is required by the Alabama child labor law. Montgomery [1921]. 8 pp.*

ALASKA.—*Governor. Report to the Secretary of the Interior [for the fiscal year ended June 30], 1921. Washington, 1921. 102 pp.*

Brief mention is made of labor conditions.

ARIZONA.—*State Mine Inspector. Tenth annual report for the year ending November 30, 1921. Phoenix [1921]. 74 pp.*

Because of the lack of production in the larger mines and a consequent shrinkage of employment, there was a marked decrease in the number of accidents in 1921. A total of 5,759 men were employed on the date of the last inspection, 3,434 of whom worked underground. The fatal accidents numbered 22 and the nonfatal accidents 509. The corresponding figures for the previous year were 13,340 employees, 53 fatal and 958 nonfatal accidents.

ILLINOIS.—*Board for Vocational Education. Annual report, July 1, 1920, to June 30, 1921. Springfield, 1921. 40 pp. Bulletin No. 20.*

Includes an account of the work of the board in promoting industrial education through part-time schools, evening schools, and full-time trade schools.

—— *Department of Mines and Minerals. Fortieth annual coal report [fiscal year ended June 30], 1921. Springfield, 1921. 324 pp.*

Statistics from this publication appear on page 221 of this issue of the MONTHLY LABOR REVIEW.

IOWA.—*Mine Inspectors. Report for the biennial period ending December 31, 1919. Des Moines, 1920. 48 pp*

Contains statistics on production, number of employees, days of employment, loss of time, and accidents.

KANSAS.—*Court of Industrial Relations. Women's Division. Cost of living survey of wage-earning women of the State of Kansas. Topeka, 1922. 42 pp.*

A summary of this survey is found on pages — and — of this issue of the MONTHLY LABOR REVIEW.

KENTUCKY.—*Department of Mines. Annual report for the year ending December, 1920. Frankfort [1921]. 252 pp.*

The report shows that 834 mines were employing a total of 58,347 men. Each company worked an average of 187 days and lost an average of 4.26 days on account of strikes. The total tonnage lost because of strikes was estimated at 1,313,774.86. The number of accidents reported in 1920 was 127 for 266,825.87 tons produced per fatal accident, as compared with 114 fatalities in 1919.

MARYLAND.—*Board of Labor and Statistics. Mining inspector. Annual report, from May 1, 1919, to May 1, 1920. Baltimore, 1921. 52 pp.*

The mining tonnage, both clay and coal, for the State in the year covered by the report was 2,965,358, or 751,201 tons less than in the preceding year. The production of coal in two counties of the State for 1919 and 1920 is shown in the following table:

WISCONSIN.—*Industrial Commission. Workmen's compensation. Ninth annual report, July 1, 1919, to June 30, 1921. Madison [1922?]. 90 pp.*

A résumé of this report appears on page 173 of this issue of the MONTHLY LABOR REVIEW.

PRODUCTION OF COAL IN ALLEGANY AND GARRETT COUNTIES IN THE YEAR ENDING MAY 1, 1920, AND IN THE PRECEDING YEAR.

County.	Tonnage.		
	1919	1920	Decrease in 1920 from 1919.
Allegany	2,723,190	2,160,288	562,902
Garrett	917,420	754,401	163,019
Total	3,640,610	2,914,689	725,921

The production per miner in Allegany County in 1920 was 867 tons; in Garrett County, 1,164 tons.

MASSACHUSETTS.—*Special Commission on the Necessaries of Life. Report, January, 1922. Boston, 1922. 177 pp.*

The act of April 27, 1921, continued the Special Commission on the Necessaries of Life for a period of one year from May 1, 1921, during which period the commission has continued its work of investigating and furnishing information concerning the cost and selling price of the necessaries of life, including its administrative duties in connection with the adjustment of rents throughout the State. The policy of the commission, it is stated, has been to regard itself strictly as a fact-finding agency and not a price-fixing board. Appendix I consists of tables and charts giving prices and index numbers of the various necessaries of life.

MICHIGAN (MARQUETTE COUNTY).—*Inspector of Mines. Report for year ending September 30, 1921. Ishpeming [1921]. [9 pp.]*

During the fiscal year 3,714 men were employed in the mines and quarries. Four fatal and 509 nonfatal accidents, of which 134 were serious, occurred during the year in the mines and on the surface. The fatality rate per 1,000 men employed in the mining industry, including quarries, was 1.09.

MISSOURI.—*Department of Education. Rehabilitation division. Vocational rehabilitation for disabled persons. Jefferson City [1921]. 11 pp.*

NEW JERSEY.—*Coal Investigating Committee. Intermediate report to the legislature, session of 1922. Trenton, 1922. 8 pp.*

NORTH DAKOTA.—*Industrial Commission. Report, 1921. Bismarck [1922]. 68 pp.*

OREGON.—*Industrial Accident Commission. Physical and vocational rehabilitation of disabled men and women who are seriously injured while under the protection of the workmen's compensation law of Oregon. Salem, 1922. 31 pp.*

TENNESSEE.—*State Mining Department. Twenty-fifth annual report, 1919. Nashville, 1920. 114 pp.*

This document is bound with the administrative report of the State Geological Survey for 1919.

WEST VIRGINIA.—*Department of Mines. First annual report for the fiscal year ending June 30, 1920. Charleston [1921]. 406 pp.*

The first section of this volume contains a report to the governor, an alphabetical list of coal companies, a directory of mines, coal and coke statistics, and reports of district mine inspectors. The second section deals with accident statistics and prosecutions.

In the year ending June 30, 1920, there were 320 fatal accidents, 848 nonfatal accidents, and 2,188 "minor" accidents. The gross tons produced in the year covered by the report totaled 78,991,316, exclusive of 1,000,000 from small country mines. There was an average of one fatal accident to every 246,847 gross tons produced.

UNITED STATES—*Federal Board for Vocational Education. Vocational rehabilitation in rural communities. A bulletin prepared for information of county agricultural*

WISCONSIN.—*Industrial Commission. Workmen's compensation. Ninth annual report, July 1, 1919, to June 30, 1921. Madison [1922?]. 90 pp.*

A résumé of this report appears on page 173 of this issue of the MONTHLY LABOR REVIEW.

—— *State Board of Education. An inventory description of Wisconsin's continuation schools. Madison, 1922. 257 pp. Wisconsin's Educational Horizon, Vol. 4, No. 3.*

This bulletin constitutes Chapter IV of Continuation schools of Wisconsin, vocational school survey.

UNITED STATES.—*Congress. Senate. Conditions in the bituminous coal fields. Report of Ethelbert Stewart, Commissioner of Labor Statistics, Department of Labor, on hours and earnings in bituminous coal mining, fall and winter of 1921. Washington, 1922. 37 pp. 67th Congress, 2d session. Senate Document No. 171.*

A summary of this investigation appears on pages 1 to 8 of the MONTHLY LABOR REVIEW for April, 1922.

—— *Department of Labor. Bureau of Labor Statistics. Building operations in representative cities, 1920. Washington, 1922. 49 pp. Bulletin No. 295. Miscellaneous series.*

A preliminary statement regarding this investigation was published in the MONTHLY LABOR REVIEW for July, 1921, pages 175 to 180.

—— —— —— *Labor legislation of 1920. Washington, 1922. 152 pp. Bulletin No. 292. Labor laws of the United States series.*

—— —— —— *National War Labor Board. A history of its formation and activities, together with its awards and the documents of importance in the record of its development. Washington, 1921. 334 pp. Bulletin No. 287. Labor as affected by the war series.*

A brief review of this bulletin is given on page — of this issue of the MONTHLY LABOR REVIEW.

—— —— —— *Use of Federal power in settlement of railway labor disputes. Washington, 1922. 121 pp. Bulletin No. 303. Conciliation and arbitration series.*

This bulletin is reviewed on pages 199 to 201 of this issue of the MONTHLY LABOR REVIEW.

—— —— —— *Wages and hours of labor in the slaughtering and meat-packing industry, 1921. Washington, 1922. 93 pp. Bulletin No. 294. Wages and hours of labor series.*

An abridgement of this report was published in the September, 1921, MONTHLY LABOR REVIEW, pp. 75–95.

—— *Department of the Interior. Bureau of Education. Salaries of administrative officers and their assistants in school systems of cities of 25,000 inhabitants or more. Washington, 1922. 38 pp. Bulletin, 1921, No. 30.*

—— —— *Bureau of Mines. Accidents at metallurgical works in the United States during the calendar year 1920. Washington, 1922. 28 pp. Technical paper 297.*

A summary of this report appears on pages 169 and 170 of this issue of the MONTHLY LABOR REVIEW.

—— —— —— *Manual of first-aid instruction for miners. By a committee of surgeons on standardization of first-aid. Revised by R. R. Sayers. Washington, 1921. 221 pp.*

This revision of the first-aid manual, first published in 1917, was prepared cooperatively by the American Red Cross and the Bureau of Mines. It is indorsed by the United States Public Health Service and by the National Safety Council, so that it is the standard for teaching first-aid to miners and for use in first-aid contests of any of these organizations.

—— —— —— *Metal-mine accidents in the United States during the calendar year 1920. Washington, 1922. 99 pp. Technical paper 299.*

A summary of this report appears on pages 168 and 169 of this issue of the MONTHLY LABOR REVIEW.

GREAT BRITAIN.—*Industrial Fatigue Research Board. Report No. 17. An analysis of the individual differences in the output of silk weavers. London, 1922. 38 pp. Textile series No. 4.*

UNITED STATES—*Federal Board for Vocational Education. Vocational rehabilitation in rural communities. A bulletin prepared for information of county agricultural agents, agricultural teachers, extension workers, and other agencies devoted to rural progress. Washington, 1922. 13 pp. Bulletin No. 72. Industrial rehabilitation series, No. 4.*

— *Interstate Commerce Commission. Collisions, derailments, and other accidents resulting in injury to persons, equipment, or roadbed, arising from the operation of steam roads used in interstate commerce, July, August, and September, 1921. Washington, 1922. 21 pp. Accident bulletin No. 81.*

During the quarter covered by this report the total number of fatalities was 1,798, 83 of which were due to train accidents, 1,596 to train-service accidents, and 119 to nontrain accidents. Of the 32,663 nonfatal injuries, 1,300 were due to train accidents, 10,366 to train-service accidents, and 20,997 to nontrain accidents. Other tables classify the accidents by cause, nature of injury, etc.

— *Railroad Labor Board. Average daily and monthly wage rates of railroad employees on Class I carriers, in effect under private control (December, 1917); under the United States Railroad Administration (January, 1920); and under decisions No. 2 (effective May 1, 1920) and No. 147 (effective July 1, 1921). Washington, 1922. 13 pp. Table. Wage series report No. 3.*

Data from this report were published in the MONTHLY LABOR REVIEW for April, 1922, pages 82 to 85.

— *Treasury Department. Public Health Service. The physiology of fatigue. Physico-chemical manifestations of fatigue in the blood. Washington, 1921. 42 pp. Public health bulletin No. 117.*

Foreign Countries.

AUSTRALIA.—*Court of Conciliation and Arbitration. A report of cases decided and awards made, including conferences convened by the president or deputy president, during the year 1920. Melbourne [1921]. xxxiv, 1249 pp.*

— (NEW SOUTH WALES).—*Board of Trade. Compendium of living wage declarations and reports. Sydney, 1921. viii, 139 pp.*

Includes wages for both industrial and rural wage earners.

CANADA.—*Department of Labor. Canada and the international labor conference. Ottawa, 1922. 33 pp. Bulletin No. 5. Industrial relations series.*

Issued as a supplement to the Labor Gazette for February, 1922.

— *Honorary Advisory Council for Scientific and Industrial Research. A plan for the development of industrial research in Canada. Ottawa, 1921. 8 pp. Bulletin No. 10.*

— — *Research and the problems of unemployment, business depression, and national finance in Canada. Ottawa, 1922. 20 pp.*

— (NEW BRUNSWICK).—*Workmen's Compensation Board. Third annual report, 1921. St. John, 1922. 40 pp.*

This report is summarized on page 174 of this issue of the MONTHLY LABOR REVIEW.

— (ONTARIO).—*Department of Agriculture. Statistics branch. Annual report, 1920. Toronto, 1921. 47 pp.*

This pamphlet contains a very brief section on "Labor, wages, and production."

FRANCE.—*Ministère des Travaux Publics. Direction des Mines. 2e Bureau. Statistique de l'industrie minérale et des appareils à vapeur en France et en Algérie pour l'année 1919, avec un appendice concernant la statistique minérale internationale. Paris, 1921. 246 pp.*

This report contains statistical information in regard to production, number of workers, wages, sickness, and accidents in the mines and metal industries of France and Algeria for the year 1919. There is an appendix giving international statistics of mineral production.

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GREAT BRITAIN.—*Industrial Fatigue Research Board. Report No. 17. An analysis of the individual differences in the output of silk weavers. London, 1922. 38 pp. Textile series No. 4.*

—— —— *Report No. 16. Three studies in vocational selection. London, 1922. 86 pp. General series No. 6.*

The three studies indicated in the title are: A.—The psychophysiological capacities required by the hand compositor, by B. Muscio; B.—The measurement of physical strength with reference to vocational guidance, by B. Muscio and A. B. B. Eyre; and C.—Physical measurements in a confectionery factory, by E. Farmer.

—— *Registrar of Friendly Societies. Reports for the year ending 31st December, 1919, Part C.—Trade unions. London, 1921. 57 pp.*

A brief review of this report is given on page 180 of this issue of the MONTHLY LABOR REVIEW.

—— (LONDON).—*County Council. Report, 1920. Vol. IV.—Education. London, 1922. 27 pp. No. 2143.*

A portion of this report is devoted to a discussion of technical, trade, and evening education, and day continuation schools.

INDIA.—*Statistical Department. Prices and wages in India. Calcutta, 1922. 246 pp. No. 1512.*

This volume, which is the 36th issue of the series, consists of three parts, namely, (1) Wholesale prices, (2) Retail prices, and (3) Wages. It includes data up to the year 1920 and in some instances up to January, 1921. Wage statistics are on the whole made up of monthly averages of the wages paid to certain laborers and artisans in each district during the last six months of each year.

NETHERLANDS.—*Centraal Bureau voor de Statistiek. Verslag over het jaar 1920. 's-Gravenhage [1921]. 33 pp.*

—— *Centrale Commissie voor de Statistiek. Jaarverslag over het jaar 1920. 's-Gravenhage [1921]. 71 pp.*

—— *Departement van Arbeid. Centraal verslag der arbeidsinspectie over 1920. ['s-Gravenhage] 1921. 267, xxvii pp. Plates.*

Report of the labor inspection service of the Netherlands for 1920.

—— —— *Verslag over het haventoezicht uitgeoefend in 1920. ['s-Gravenhage] 1921. 102 pp. Plates.*

Report on the inspection of working conditions of dock and harbor workers in the Netherlands in 1920.

UNION OF SOUTH AFRICA.—*Office of Census and Statistics. Official Year Book, 1921. Pretoria, 1921. 1,007 pp.*

Contains statistics mainly for the period 1910–1920. Of special interest to labor are chapters on Labor and industrial conditions, Prices and cost of living, Native affairs, Agriculture and fisheries, and Mines.